XXIII International Congress of History of Science and Technology

Ideas and Instruments in Social Context

PROGRAM

28 July - 2 August 2009
Budapest, Hungary
Welcoming Address

On behalf of the Local Organizing Committee let me welcome you in the capital of Hungary. We are very glad that four years ago, in Beijing, you voted for the next Congress being organized in Budapest. It is really a great honour to host, after Mexico and China, the Congress of the History of Science, and Technology this time the 23rd.

We are quite sure that this Congress is the biggest ever of its kind. We are welcoming here 1300 registered participants, mostly authors, from 60 different countries. We are going to work in the coming days in 52 announced sessions and 79 self-organized symposia. The General Assembly of the International Academy of the History of Science, more than twenty General Assemblies of the international committees, meetings of special groups, and self-organized round-table meetings will take place during the week. It seems that the main theme of the Congress ("Ideas and Instruments in Social Context) was well chosen, and got many researchers to Budapest. The anniversaries of Galilei (1609-2009) and Darwin (1809-1859-2009) also will be duly commemorated. Some other topics aroused equally great interest among the historians of science all over the world as well as among the general public.

During the coffee breaks you probably will spend some time in the beautifully decorated lounge of the Budapest University of Technology and Economics. You will notice that this building and its garden are a monument worth studying more closely from the aspect of history of science and technology. Since 1927 busts of eminent professors have been erected to commemorate leading academics and teachers of the University. At each bust you will find an explanation about the activities of these national heroes of science and technology. First to be mentioned is the bust of Palatine Joseph, younger brother of emperor Francis I of Hapsburg-Lotaringia, who had great merits about the foundation of this university. The rector, during whose time the main building was erected, was chemist Vince Wartha, re-discoverer of a special glaze for ceramics; walking out to the garden the row of busts continues: among others, we can see here the bust of mathematician and chemist John von Neumann, a former student of this University, whose name, perhaps, does not require closer explanation.

In order to honour the memory of its great scientists, Hungary keeps erecting a considerable number of busts or memorial tables. Among the sites to be visited we mention the nearby University of Sciences, the Trefort Garden, near of some of the hotels accommodating the participants, and the Hungarian Museum for Science, Technology and Transport in the City Park. It would be a great honour if you could visit these sites in your spare time. Also some of the field trips are directed towards these sites.

Last but not least let me express our deepest gratitude to the institutions and personalities supporting and/or sponsoring the Congress. Among our supporters we shall first mention the Budapest University of Technology and Economics which willingly let us their lecture halls and facilities. Thanks are due to the Federation of Technical and Scientific Societies and the Hungarian Academy of Sciences. Our main sponsors were the Hungarian UNESCO Committee and the National Office of Research and Technology. We must mention the assiduous and professional work of SCOPE Ltd., the group that provided the administrative background, particularly Gusztáv Hencsey, Mariann Kindl, and Viktor Richter, who became a close friend of us all during the past 18 months. Individuals, who helped the Congress with enthusiastic voluntary work, were the members of the Local Organizing Committee, all...
outstanding scientists of their trade, and Mrs. Catherine Jami, assessor of IUHPS/DHST, who provided the French translations of the circulars. Finally, this Congress could not have been brought into being without the wise and professional advice of Professor Ronald Numbers, and Professor Efthymios Nicolaidis, President and Secretary General, respectively, of IUHPS/DHST. Our special gratitude goes to the plenary speakers, the organizers and speakers of the symposia and the speakers of the sessions as well as to all our participants, who managed to learn the tricks of the registration system.

At this point I want to wish you, together with all the Hungarian organizers, a very nice and useful time in our capital.

Éva Vámos
Chair of the Local Organizing Committee
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Division of History of Science and Technology
IUHPS/DHST

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Executive LOC
Mariann Kindl, SCOPE Meetings Ltd.
Éva Thiry, SCOPE Meetings Ltd.

Organizer
The Hungarian National IUHPS Committee
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Plenary Sessions

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Tuesday, 28 July, 08.30 – 09.00, Room: A2
Chair: Péter Szegedi

Plenary Lectures
Tuesday, 28 July, 09.00 – 11.00, Room: A2
Chair: Ronald Numbers
Darwin's Sacred Cause
James Moore

Chair: Éva Vámos
The Combersome Material Heritage of Astronomy
Paolo Brenni

Chair: Karl Hall
From Hungary to the World: Martians of Science
István Hargittai

Friday, 31 July, 09.00 – 11.00, Room: A2
Chair: Eberhard Heinrich Knobloch
Islam and Modern Science
Ekmeleddin Ihsanoglu

Scientists in Exile – A Phenomenon in Totalitarian Regimes. The Czechoslovak Case
Soňa Strbáňová, Antonín Kostlán

Technology Transfer in Early Modern Europe
Robert Halleux

Sunday, 2 August, 10.00 – 12.00, Room: A2
Chair: Norbert Kroó
Antikythera Mechanism: Its meaning for Greek Astronomy
Alexander Jones

Chair: Éva Vámos
Women in Science in the US
Margaret Rossiter

Women in Science in Europe: From Sof'ja Kowalewska to Dorothy Hodgkin
Annette B. Vogt

Closing Ceremony
Sunday, 2 August, 12.00 – 12.30, Room: A2
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Detailed Program of Symposia

S01  Ancient and Medieval Astronomy with Special Emphasis on its Socio-cultural Context
Organisers: S.M. Razaullah Ansari, Julio Samso, Anne Tihon
Room: B2

Session I:  Ptolemy, his Writings, and their Transmission: Status of Present Research
Wednesday, 29 July, 15.00 – 17.00
Chair: Alexander R. Jones

Babylonian and Greek Antecedents of Ptolemy's Tables
Alexander R. Jones

Ptolemy and his Time: An Unedited Astronomical Papyrus
Anne Tihon

Introducing the Edition of the Handy Tables of Ptolemy
Raymond Mercier

Ibn al-Raqqam's al-Zij al-Mustawfi
Julio Samso

Wednesday, 29 July, 17.30 – 19.30
Chair: Julio Samso

Ptolemaism in al-Andalus: Jābir b. Aflah and the Evolution of the Term Hay’a
José Bellver

Tasyir in the Islamic West: Ibn Abi-l-rijal and Alfonso X
Montse Díaz-Fajardo

Jagannātha’s Samrāt-siddhānta: A Translation of Almagest into Sanskrit
Ramasubramanian K. Sharma

The Indian Scholar Khayrullah Muhandis and His Persian Translation of Al–Tusi
S.M. Razaullah Ansari

Session II:  Contextual Oriental Studies
Thursday, 30 July, 15.00 – 17.00
Chair: Raymond Mercier

Buddhist Astronomy in its Cultural Context
Michio Yano

Patronage of Astronomy and Astrology in Post-classical Islamic Societies
Sonja Brentjes

Knowledge Secrecy and the Chinese Assimilation of Islamic Astronomy in the 14th Century
Yunli Shi
The Impact of the Telescope on Astronomy and Society in China
Xiaochun Sun

Thursday, 30 July, 17.30 – 19.30
Chair: Anne Tihon

Yavana-yantra to Yantra-râja
Sreeramula Rajeswara Sarma

Astronomy Part of the Kerala Work, Yuktibhasa (circa 1530 CE)
Sriram Subrahmanya Myyasandra

A Survey of Persian Zijes in Extant in Iran with Special Stress on their Use in
Medieval Iranian Society
Farid Ghassemou, Fariba Sabet

Final Remarks by the Chair of Organizing Committee
S.M. Razaullah Ansari

S03 Status in Mathematics: In Particular the Role of Applications
in the First World War
Organisers: Jeremy Gray, Reinhard Siegmund-Schultze
Room: A16 and D1 (on Friday)

Thursday, 30 July, 15.00 – 17.00
Chair: Michael Eckert

The Rise of Complex Analysis in France and Germany
Jeremy J. Gray

Cauchy's and Weierstrass's 'Schools' on Complex Function Theory: A Comparison
Umberto Bottazzini

Function Theory for War: Ballistics and Fluid Mechanics in France, 1915-1930
David Aubin

The British Use of Mathematics in the First World War
June E. Barrow-Green

Thursday, 30 July, 17.30 – 18.30
Chair: June Barrow-Green

Developing a Theory of Ballistics from Experimentation and Mathematics: Oswald
Veblen, Forest Ray Moulton, and the Aberdeen Proving Ground Project
Deborah Kent

The Rise of Exterior Ballistics in America, 1880-1929
Alan Gluchoff

Friday, 31 July, 11.30 – 13.30
Chair: Deborah Kent

Mathematics in a Dead End: Arnold Sommerfeld and the Turbulence Problem of the
Early 20th Century
Michael Eckert
Richard von Mises: A Pioneer of Practical and Theoretical Aerodynamics
Reinhard Siegmund-Schultze

Aviation and Aerodynamics Alongside Mathematics: The Case of the University of Leipzig
Karl-Heinz Schlote

S04 Mathematical Analysis from the Eighteenth to the Nineteenth Centuries
Organisers: Craig Fraser, Michiyo Nakane
Room: A8

Tuesday, 28 July, 11.30 – 13.30
Chair: Michiyo Nakane

Elaboration of Euler’s Ideas on Series in the Early 19th Century
Hans Niels Jahnke

Euler and Functions of a Complex Variable
Craig Fraser

Two Ways of Understanding the Nature of Transcendental Functions in Mathematical Analysis
Carlos Alvarez

From Lagrange to Frege: Is a Function an Expression?
Marco Panza

Tuesday, 28 July, 15.00 – 17.00
Chair: Craig Fraser

Da Cunha, Stockler and Mathematical Analysis in Portugal in the Period 1770-1820
Luis R. Saraiva

Christian Gilain

Numbers, Limits, and Continuity in Gauss
Giovanni Ferraro

“Throwing Some Light on the Vast Darkness that is Analysis”: Niels Henrik Abel’s Contributions to the Reorientation of Analysis in the 1820s
Henrik Kragh Sørensen

Tuesday, 28 July, 17.30 – 19.30
Chair: Hans Niels Jahnke

What Makes Mathematical Analysis Rigorous? Counterexamples and Pathological Functions
Michiyo Nakane

The Place of Analysis in 19th Century British Mathematics
Adrian Rice
Mittag-Leffler and Weierstrassian Analysis  
Laura E. Turner

Rigour vs. Intuition: Teaching and Research in Analysis in Turin in the Second Half of the Nineteenth Century  
Erika Luciano

S06 Transmission and Transformation of Mathematics and Mathematical Instruments in their Social Contexts, East and West  
Organisers: Joseph W. Dauben, Liu Dun

Room: C3

Saturday, 1 August, 09.00 – 11.00  
Chair: Joseph W. Dauben

Qin Jiushao’s Divining Method and in which the Mathematical Theory Contained  
Gang Hou

The Introduction of Napier’s Rods in China  
Jose A. Cervera

Karel Slavíček and Yan Jiale Method  
Dun Liu

On the History of a Compass  
Galina A. Zverkina

Saturday, 1 August, 11.30 – 13.30  
Chair: Dun Liu

Circles and Squares, Cubes and Spheres, East and West  
Joseph W. Dauben

Leibniz’s View of the I Ching  
Mary Sol de Mora Charles

The Calculating Program of the Lunar Theory in Yuzhi Lixiang Kaocheng (1725)  
Dalong Lu

“Wasan” Mathematicians, Technocrats and Samurai during the Edo Period in Japan – Seki Takakazu’s Residence and the Social Status of Mathematicians  
Shigeru Jochi

Trigonometric Tables, Their Utility, and Making in  
Jiang-Ping Jeff Chen

S07 The Nature and Aims of Prediction in Ancient Science  
Organiser: Francesca Rochberg

Room: A12

Friday, 31 July, 17.30 – 19.30  
Chair: Francesca Rochberg

Prediction from and in the Sky in Babylonia  
Hermann Hunger
“Inference from Signs and Prediction”
Francesca Rochberg

The Earliest Scientific Predictions
John P. Britton

Babylonian Period Relations
Teije de Jong

Mathematical Models or Observational Aids? Shadow Length Schemes in Babylonian Astronomy
John M. Steele

S08 Ideas and Instruments in the Development of Physics and their Use in Science Education
Organisers: Art Stinner, Jürgen Teichmann, Peter Heering
Room: A7

Session I.: From Mechanics to Electromagnetism
Tuesday, 28 July, 15.00 – 17.00
Chair: László Kovács

Atwood’s Machine: A Historical Case Study to Complement and Enrich Contemporary Methods of Teaching Newton’s Laws of Motion.
Arthur Stinner

The Hero and the Dragon – Fraunhofer and the Dark Lines of the Sun’s Spectrum
Jürgen Teichmann

The Induction Coil and the Electromagnetic Waves
Sándor Jeszenszky

Joule’s Electromagnetic Rotor and Paddle Wheel Apparatus
Giorgio Dragoni, Martina Lodi

Session II.: From Electromagnetic Waves to Einstein
Tuesday, 28 July, 17.30 – 19.30
Chair: Jürgen Teichmann

The Changing Meanings of Precision – from Coulomb to Gauss and Weber
Susanne Heinicke, Peter Heering

The Eötvös Apparatus: The Equivalence of Internal and Gravitational Mass
László Kovács

The Experimental Confirmation of Einstein’s 'Heuristic' to Explain the Photoelectric Effect: Going Beyond the Textbook Presentation
Mansoor Niaz

General discussion and closing remarks
Art Stinner, Jürgen Teichmann
S09 Islamic Science in Context: Texts, Instruments, Locales, and Institutions “in Memory of Professor Edward S. Kennedy”
Organisers: Jamil Ragep, Mercè Comes Maymó
Room: C5

Session I.: Practical Astronomy and Instrumentation: Use and Wider Significance
Tuesday, 28 July, 11.30 – 13.30
Chair: Mercè Comes Maymó

Trigonometric Instruments in Medieval Islam. New Perspectives and Possibilities
Emilia Calvo

Medieval Arabic Astronomical Instruments with Astrological Functions
Josep Casulleras

Exposing the Forgery of an Astronomical Instrument: An Alleged Moroccan Astrolabe Dated 1845
Ingrid Hehmeyer

The Simple Version of the Sarrājiyya Instrument (14C): Textual and Technical Remarks
Roser Puig

Mathematical Astrology in Astronomical Handbooks
Benno van Dalen

Session II.: The Multifarious Contexts of Islamic Science
Tuesday, 28 July, 15.00 – 17.00
Chair: Mercè Comes Maymó

Bīmāristān al-Manṣūrī: State and Medical Practice in Mamluk Egypt (1285-1304)
Ahmed Ragab

The Boundaries of Trigonometry: Al-Samaw’al and the 480-Degree Circle
Glen R. Van Brummelen

Environmental Studies about Cities in Medieval Islam
Lutfallah Gari

The Sultan and the Stars: The Kitab al-Tabsira fi ilm al-nujum of al-Ashraf Umar
Petra G. Schmidl

Several Remarks on the “Ashkāl al-Ta’sīs” by al-Samarqandī and Commentaries on it by al-Rūmī
Irina Lyuter

Session III.: Philosophical and Theological Contexts of Islamic Science
Tuesday, 28 July, 17.30 – 19.30
Chair: Mercè Comes Maymó

“Stealing the Water” and Commenting on the Void. Philosophical and Technological Aspects of the Greek and Arabic Perceptions of the Clepsydra
Constantin Canavas
A Hidden School: The Scientists-Philosophers of the 12th Century in al-Andalus
Miquel Forcada

Astrology in Early Kalām and Tafsīr
Robert G. Morrison

Session IV.: Geographical Knowledge and Nautical Application
Wednesday, 29 July, 09.00 – 11.00
Chair: Mercè Comes Maymó

Ibn Fadlallah on the Nautical Winds
Mónica Herrera-Casais, Mohsen Zakeri

al-Mursî’s Nautical Chart in the Mediterranean Context
M. Mercè Comes

The Qibla, From the Sky to the Sea
Monica Rius

Le Géographe a l’Idrisi dans l’Historiographie Espagnole Pendant les XVIIIe et XIXe Siècles
Juan Martos Quesada

S12 Ideas and Instruments in the Social Context in the Ottoman Empire and the National States
Organisers: Ekmeleddin Ihsanoglu, Efthymios Nicolaidis, Tuncay Zorlu
Room: C1
Friday, 31 July, 15.00 – 17.00
Chair: Ekmeleddin Ihsanoglu

Evolution, Functioning and Capacity of the Mediterranean Windmills
Atilla Bir, Mustafa Kaçar

The Ottoman Royal Cannon Foundry: “Tophane-I Amire”
Salim Ayduz

Shemseddin Sami’s Treatise of Astronomy, ‘Gok’ (Sky): An Effort in the Way of Formation of Turkish Scientific Language
Sevtap Kadioglu

An Analysis of Qushji’s Astronomical Textbooks
Tofigh Heidarzadeh

Friday, 31 July, 17.30 – 19.30
Chair: Tuncay Zorlu

Engineering Periodicals in the Ottoman Turkish
Cüneyd Okay, Tuncay Zorlu

Ottoman Nautical Terminology as Attested in the 18th Century Sources
Tuncay Zorlu

Locks and Keys: Their Story From Past to Present
Semra Saracoglu, Bulent Karakas
Books on Darwin and Darwinism in the Ottoman Empire
Cemil Özcan Ceyhan

Saturday, 1 August, 09.00 – 11.00
Chair: Constantine Skordoulis

The Point and Importance of Works of the Nasiruddin Tusi in the Ottoman World
Nihal Ozdemir

Ottoman Phd Dissertations of Chemistry Completed in European Universities
Emre Dolen

First instruments of the National Observatory of Athens. When, From Where, Why and How.
Panagiotis G. Lازos

The Reception of Ernst Haeckel's Ideas in Greece
Constantine D. Skordoulis, Kyriakos Kyriakou

Saturday, 1 August, 11.30 – 13.30
Chair: Mustafa Kaçar

The Interaction Between Mathematics and Greek Trade During the Period of the Ottoman Occupation
Maria Terdimou

The Foundation and Early Phase of the Imperial Observatory of Constantinople
Christophe Benoist

Le Rôle Social et Politique des Ingénieurs du Corps du Génie dans le Jeune État Grec: Entre l'Europe et les Structures Traditionnelles
Fotini Assimacopouloua, Konstantinos Chatzis

S13 Darwin Outside Europe: Ideas of Evolution in Comparative and Global Perspective
Organisers: Cemil Aydin, Marwa Elshakry
Room: C1

Wednesday, 29 July, 15.00 – 17.00
Chair: Olga Restrepo Forero

Darwinism After 1945: The State and Fate of 'Evolution' in Early Cold War Culture
Christian Geulen

Moving Darwin / Tales of the Travels of Darwinism
Olga Restrepo Forero, Malcolm Ashmore

Yādollāh Sahābī’s Defence of the Theory of Evolution
Martin Riexinger

Darwin in Non-Western Nationalist Thought
Cemil Aydin
S14  The Commerce of Science: Exchanging Objects, Instruments and Ideas in the Early Modern World  
Organisers: Daniel Margoczy, Mario Biagioli  
Room: A15

Session I.: Owning and Selling Instruments  
Wednesday, 29 July, 15.00 – 17.00  
Chair: Harold Cook

Georg Hartmann and the Beginnings of the Printed Scientific Instruments Trade  
Suzanne Karr Schmidt

Trading Up: Instruments and Architecture in Early-Modern England  
Stephen A. Johnston

Session II.: The Circuits of Natural History  
The Price of Mobility: Transporting Exotic Animals in Early Modern Europe  
Daniel Margoczy

Trading Places: Domestic Worlds and Materials of Scientific Exchange in Early Enlightenment Danzig  
Alix Cooper

Wednesday, 29 July, 17.30 – 19.30  
Chair: Stephen Johnston

Final Discussion

Session III.: Science and the State  
Commerce and Science in the Dutch Republic  
Harold J. Cook

A Sampling History of Autodidacticism  
Avner Ben-Zaken

Scientific Practice as Political Economy in the English Atlantic Empire, 1650-1688  
Matthew Underwood

S15 Chemistry in the Aftermath of World Wars  
Organisers: Yasu Furukawa, Ernst Homburg, Jeffrey Johnson, Gábor Palló  
Room: A13

Session I.: Chemistry and Chemical Industry in the Aftermath of World War I.  
Wednesday, 29 July, 11.30 – 13.30  
Chair: Yasu Furukawa

The Impact of World War I upon Japanese chemistry  
Yoshiyuki Kikuchi

French Chemists and the Reorganization of Chemistry in the International Community after the First World War  
Danielle M.E. Fauque
Soviet Chemistry after the Civil War
Yakov M. Rabkin

Crisis, Change and Creativity in Science and Technology (Keynote address)
Jeffrey A. Johnson

Session II.: Chemistry and Chemical Industry in the Aftermath of World War II.
Wednesday, 29 July, 15.00 – 17.00
Chair: Ernst Homburg

World War II, the Cold War, and British Women Chemists
Sally M. Horrocks

The Difficult Beginning of the German-Israeli Scientific Cooperation
Ute Deichmann

Chemistry at the University of Strasbourg in the Aftermath of World Wars I and II
Pierre Laszlo

Commentary
Carsten Reinhardt

Session III.: Chemical Technology Transfer in the Aftermath of Two World Wars
Wednesday, 29 July, 17.30 – 19.30
Chair: Gábor Palló

Isolation & Innovation: German Chemicals and American Political Economy after World War I
Kathryn Steen

Role of Prettre’s Lyons Laboratory in the Postwar Development of Fischer-Tropsch Synthetic Oil Technology in France.
Baptiste Voillequin

Postwar Transfer of Synthetic Rubber Technology Between Germany, Russia and the USA
Peter J.T. Morris

Commentary
Anthony S. Travis

S16 Mathematics in the Austrian-Hungarian Empire
Organisers: Christa Binder, Martina Becvarova
Room: C4
Saturday, 1 August, 09.00 – 11.00
Chair: Martina Becvarova

The Appointment Policy in the Austro-Hungarian Monarchy
Christa Binder

The Reception of Bolyai’s Geometry in the Austrian-Hungarian Empire
Katalin Munkácsy

Greek Mathematical Publications in Vienna in the 18th-19th Centuries
Christine Phili
Saturday, 1 August, 11.30 – 13.30  
Chair: Christina Phili

Franc Hočevar and His Scientific Work  
Marko Razpet

Franc Hočevar - Textbooks Writer  
Nada Razpet

Mathematical Education in the Province of Voivodina Within the Habsburg Monarchy  
Aleksandar M. Nikolić

Wilhelm Matzka (1798–1891) and his Position in the Austro-Hungarian Mathematics  
Michaela Chocholova

Saturday, 1 August, 15.00 – 17.00  
Chair: Peter Schmitt

Karel Pelz an Outstanding Geometer of the 19th Century  
Marta Pémová, Zita Sklenáriková

The Mathematics and its Professors at the Mining (and Forestry) Academy in Schemnitz  
Miroslav Tibor Morovics

Czech Mathematicians and their Role in the Development of Mathematics in the Balkans  
Martina Becvarova

Mathematics in Lwów Before the Famous Lwów Mathematical School  
Stanislaw Domoradzki

Saturday, 1 August, 17.30 – 19.30  
Chair: Christa Binder

“The Crisis of Intuition” – Austrian-Hungarian Contributions in the Quest of Defining the Mathematical Term “Dimension” from the 1850’s to the 1920’s  
Bernhard Johann Karl Beham

Muslim Ideas and Instruments in the Mathematics and Astronomy of Austria-Hungary  
Harald Gropp

S17 Mathematical Discoveries and Demonstrations: East and West  
Organisers: Chikara Sasaki, Helène Bellosta, Ioannis Vandoulakis, Feng Lisheng  
Room: A1

Saturday, 1 August, 09.00 – 11.00  
Chair: Chikara Sasaki

Two Archetypes of Mathematical Discoveries and Demonstrations: Ancient Greece and Ancient China  
Chikara Sasaki
Early Greek Mathematics and Eleatic Philosophy: A Reappraisal of a Controversial Relation
Ioannis M. Vandoulakis

The Treatise on the Section of a Cone of Serenus of Antinoe and its Relation With the Book XII of Euclid’s Elements
Konstantinos S. Nikolantonakis

Hélène Bellosta

Saturday, 1 August, 11.30 – 13.30
Chair: Hélène Bellosta

Epistemic Aspects of Algebraic Demonstration: East and West
Albrecht Heeffer

About the Reading of Diophantus Between the 16th and 17th Century
Paolo Freguglia

Les Mathématiques de Newton Après les Principia
Massimo Galuzzi

Leibniz’s Parisian Studies on Infinitesimal Mathematics
Eberhard Heinrich Knobloch

Saturday, 1 August, 15.00 – 17.00
Chair: Ioannis Vandoulakis

History of Demonstration as Vital Ingridient of Mathematics
Michael I. Monastyrsky

Pre-modern Japanese Mathematics, Wasan and Demonstration
Tatsuhiko Kobayashi

The Comparative Studies on the Discoveries and Demonstrations in the Eighteenth-century Mathematics in East and West
Nobuo Miura

Saturday, 1 August, 17.30 – 19.30
Chair: Feng Lisheng

Styles de Démonstration en Philosophie Naturelle: Galilée, Tartaglia, Borelli.
Enrico Giusti

Descartes and the "Impossible" Constructions with Ruler and Compass
Aldo Brigaglia

On the Seki Takakazu’s Summation Formulae for of Powers of Natural Numbers and its Construct Method
Lisheng Feng
S18 History of Science and the New Media: Resources for Connecting the Global Community of Scholars
Organisers: Peter Harper, Stephen Weldon
Room: A4

Wednesday, 29 July, 09.00 – 11.00
Chair: Peter Harper
The Website @.Ampère and the History of Electricity
Christine Blondel
Physics Educational Instruments in New Media: Case Study of Capodistrian School
Stanislav J. Juznic
Managing the Dispersion of Sources on Science History: National Bibliography
Birutė Railiūnė
Craig Bellamy

Wednesday, 29 July, 11.30 – 13.30
Chair: Peter Harper
Digital Media at Centro Simão Mathias
Ana M. Alfonso-Goldfarb, Marcia H. M. Ferraz, Silvia I. Waisse de Priven
World History of Science Online: Citation, Standards and Web Services
Gavan J. McCarthy
The Cost of Free Access: Making the Isis Bibliography Available on the Open Internet
Stephen P. Weldon

S19 Physics and Cold War
Organisers: Christian Forstner, Leonardo Gariboldi
Room: A14

Saturday, 1 August, 09.00 – 11.00
Chair: Christian Forstner
The Nobel Prize and the Cold War
Robert Marc Friedman
The Haber Institute in Berlin During the Cold War
Dieter Hoffmann

Saturday, 1 August, 11.30 – 13.30
Chair: Falk Mueller
The Spy Who Came In From the Lab: A Cold War Tale Based on Real Physicists
Simone Turchetti
Between East and West? Austrian Neutrality, Cold War, and Nuclear Physics
Christian Forstner
Physics in Spain Under Franco
Néstor Herran, Xavier Roqué

When Latitude and/or Altitude Matters. International Collaborations in Cold-War Times Cosmic-Ray Physics
Leonardo Gariboldi

Saturday, 1 August, 15.00 – 17.00
Chair: Leonardo Gariboldi

The Double Track for Superconductivity During the Cold War
Georges Waysand

The Recommencement of Electron Microscopy After World War II in the Two German States
Falk Mueller

Interacting Fields—Quantum Field Theory and the Conceptual Borderlands Between Solid-State and Particle Physics During the Cold War
Christian Joas

Pictures Without Problems: The Reconstitution of an International Physics Community in the 1950s
Elvira Scheich

S21 Questions of Reflexivity: The International Circulation of Knowledge and Techniques
Organisers: A. Michael Osborne, Jahnavi Phalkey
Room: A15

Session I.: Scientific and Popular Medicine in the Portuguese Empire
Tuesday, 28 July, 11.30 – 13.30
Chair: Mike Osborne

Teaching Medicine and Learning How to Cure: the Circulation of European and Indigenous Knowledge in 19th Century Portuguese Colonies
Cristiana Bastos

Climatology, Parasitology, and the Development of Tropical Medicine in 19th Century Brazil
Flavio Coelho Edler

The International Circulation of Medical Knowledge About Malaria
Monica Saavedra

Comments: audience and members of the research team for “Empires, Centers, and Provinces: the Circulation of Medical Knowledge in the Nineteenth Century,” Instituto de Ciências Sociais, Fundação para a Ciência e Tecnologia, Lisbon, Portugal

Session II.: Medicine, Race and Governance
Tuesday, 28 July, 15.00 – 17.00
Chair: Mike Osborne

The Circulation of Medical Knowledge in Mexico, During and After the French Intervention, 1860s-80s
Paul Edison
From Race Crossing to Over Population: Scientific Discourses on the Population of Jamaica (1929-1945)
Jill Briggs

Construction of Medical Hegemony: An Exploration into Colonial Encounters in Anatomical Knowledge in India
Jayanta Bhattacharya

Session III.: South Asian Texts and Contexts
Tuesday, 28 July, 17.30 – 19.30
Chair: Jahnavi Phalkey

Worldly Visions: Science and Modernity in Colonial India
Prakash Kumar

Western Science in Late 19th-Early 20th Century Hindi-Language Print Media
Rajive Tiwari

Scientific Correspondence for the Global Diffusion of Theory: The Case of F. Mesnil’s Laboratory of Tropical Zoology at the Institut Pasteur (First Third of the 20th Century)
Annick Opinel

S22 Learning, Producing and Using Medical Knowledge in Colonial Settings
Organisers: Cristiana Bastos, Renilda Barreto
Room: A15

Wednesday, 29 July, 09.00 – 11.00
Chair: Cristiana Bastos

Introduction, Research Agenda, and Theoretical Goals
Cristiana Bastos

Political Crisis, Exile, and the Circulation of Medical Concepts: M. J. Henriques de Paiva Between Portugal and Brazil (1800-1829)
Maria Renilda N. Barreto, Luiz Otavio Ferreira

Learning to Heal in the Santa Casa da Misericórdia’s Hospital (Rio de Janeiro, First Half of the 19th Century)
Tânia S. Pimenta

Medical Knowledge Applied to the Education: The Mutual Teaching in Nineteenth Century
Tereza Cardoso

Brazil and Tropical Medicine from the 1880s to the Great War
Jaime L. Benchimol

Wednesday, 29 July, 11.30 – 13.30
Chair: Renilda Barreto

Folk Hydrotherapy and the Science of Medical Hydrology in Brazil and Portugal
Maria Manuel Quintela, Cristiana Bastos

Pharmacies, Industries, and Overseas: Cinchona and Quinine (18th-20th Centuries)
João Rui Pita
Babel of races: classification and anthropology in ‘Portuguese Timor’
Ricardo Roque

From Hospitals to Bush Clinics: The Politization of Health Care in Portugal’s African Colonies
Philip J. Havik

Rolling Bones or Probabilistic Softwares: Deterministic Chaos in Mozambican Healing and in Risk Analyses
Paulo Granjo

Final Commentary by Discussant
Saraiva Tiago

S23  A Change in Empires: European and North American Influences in Latin America’s Scientific World in the Nineteenth and Twentieth Centuries
Organisers: Camilo Quintero, Shawn Mullet
Room: A8
Saturday, 1 August, 09.00 – 11.00
Chair: Shawn Mullet

Camilo Quintero

The Rebuilding of German Influence in Latin America through Medical Science Between the World Wars
Magali Romero Sá

The Rockefeller Foundation and the Introduction of Genetics in Mexico
Ana Barahona

Building Brazilian Bridges: Gleb Wataghin and Physics at the University of Sao Paulo
Shawn Mullet

Saturday, 1 August, 11.30 – 13.30
Chair: Camilo Quintero

Continental Bridges: Globalization of Geological Cultures from a South American Perspective at the Turn of the 20th Century
Maria Margaret Lopes

S24  Global Visions? The Telescope between Competition and Collaboration
Organisers: Sven Dupré, Albert van Helden
Room: A9
Saturday, 1 August, 11.30 – 13.30
Chair: Sven Dupré

Introduction: The Telescope Between Competition and Collaboration
Sven Dupré
Galileo's Shopping List: an Overlooked Document About Early Telescope Making
Giorgio Strano

Johann Wiesel's Telescopes and his Clientele
Inge Keil

Astronomical Sites in the Dutch Republic, or the Changing Use of the (Astronomical) Telescope in Institutional and Private Settings During the 17th and 18th Centuries
Huib J. Zijderveld

The Art of Polishing: Practice and Prose in 18th-century England
Jim Bennett

Saturday, 1 August, 15.00 – 17.00
Chair: Sven Dupré

Networks of Telescope Makers and the Evolution of Skill: The Evidence From Observatory and Museum Collections
Gloria C. Clifton

Astronomy in the Field: Mason, Dixon and the Greenwich Observatory, 1763 - 1768
Nicky Reeves

Dollond or Fraunhofer: Instruments and Practices for Early Nineteenth Century Star Chart Observations
Klaus Staubermann

The Limits of the Universe and the Limits of the Telescope: A Controversy on Stellar Distances in the Nineteenth Century
Pedro M.P. Raposo

Saturday, 1 August, 17.30 – 19.30
Chair: Sven Dupré

Topography as Instrument: High-Altitude Telescope Observations and the Rocky Mountain Eclipse of 1878
Steve Ruskin

The Smithsonian Institution’s Contribution to Global Networking in Astronomy
David H. DeVorkin, Teasel Muir-Harmony

The Making of Space Astronomy
Robert W. Smith

Commentary
Mario Biagioli

S25 Science as a Matter of Identity and Modernity in Latin America: 'Positivism' and 'Positivisms' in the Late XIX and Early XX Centuries
Organisers: Natalia Priego, Sonia Lozano
Room: A11

Wednesday, 29 July, 17.30 – 19.30
Chair: Sonia Lozano

Porfiriato, Pisciculture et Progrès
Minerva Contreras-Alvarado, Dr. Ismael Ledesma-Matos
The New Visions of Venezuela in the Late XX Century: The Contributions of the Positivists
Yajaira Freites

Scientific Universalism and Controversies with a Positivist Perspective in Brazil
Bernardo J. Oliveira

Is There a Latin American Philosophy of Science? Notes Upon Late-19th and Early-20th Century Mexico
Natalia Priego

Juan J. Martín-Frechilla

S26 Interactions between Mathematics and the Natural Sciences: Scientific Realities and Social Representations (1750-1950)
Organisers: Christian Gilain, Tom Archibald
Room: A16

Saturday, 1 August, 15.00 – 17.00
Chair: Tom Archibald

Les Premiers Travaux de d’Alembert en Hydrodynamique (1745-1750) : Une Nouvelle Problématique
Gerard Grimberg

L’Hydrodynamique et le Calcul Intégral à Plusieurs Variables dans la Seconde Moitié du XVIIIe Siècle
Alexandre Guilbaud

Les Équations aux Dérivées Partielles chez D’Alembert, Euler et Lagrange: des Mathématiques Mixtes aux Mathématiques Pures
Guillaume Jouve

Choosing and Measuring Physical Parameters for Mathematically
Muriel Guedj, Arnaud Mayrargue

Martina Schiavon

Saturday, 1 August, 17.30 – 19.30
Chair: Christian Gilain

Henri Poincaré’s Approach to Astronomy
Scott A. Walter

Integral Equations Between Theory and Application, 1900-1920
Thomas Archibald, Rossana Tazzioli

Different Views on Applied Mathematics in Germany in the 1920s
Birgit Bergmann

Group Theory and Quantum Mechanics: Van Der Waerden’s Contribution
Martina R. Schneider
S27  Spectroscopy: Science and Society  
   Organisers: Peter Maria Schuster, George N. Vlahakis  
   Room: A8

Saturday, 1 August, 15.00 – 17.00  
   Chair: George N. Vlahakis

   Spectroscopy in Ireland in the Late 19th Century  
      Denis Weaire, Se O’Connor

   Spectroscopy in Greece. The Early Days  
      George Vlahakis

   The Scientific Network of Robert W. Bunsen, Founder of Spectroscopy, in the Light of his Private Library  
      Rudolf W. Soukup

Saturday, 1 August, 17.30 – 19.30  
   Chair: Denis Weaire

   Historical Development of the Spectroscopy of Planetary Atmospheres  
      Bruno P. Besser

   Computer Simulations: A New Way to Approach Nature  
      Franjo Sokolic, Giovanni Ciccotti

   Applying the Doppler Principle to the Amici Prisms – A Think-different in Astronomy  
   Giving Birth to Astrophysics  
      Peter Maria Schuster

S28  Visual Languages (and Representations) of the Sky:  
   Frameworks and Focal Points in Social Context  
   Organisers: Cornelia Lüdecke, James Fleming  
   Room: A5

Wednesday, 29 July, 09.00 – 11.00  
   Chair: Cornelia Lüdecke

   Socializing the Skies: British Skies in Popular Culture 1780-1880  
      Marilyn Gaull

   La Niña, Stellar Portents, and the Extinction of Easter Island’s Birdmen, 1862-1866  
      Gregory T. Cashman

   Instructions for Cloud Observation at Meteorological Stations in Germany Before the International Year of Clouds 1896/97  
      Mathias Deutsch, Michael Börngen, Karl-Heinz Poertge

   Seeing Icebergs in the Sky: G. I. Taylor’s Newfoundland Voyage  
      Daniela K. Helbig

Wednesday, 29 July, 11.30 – 13.30  
   Chair: James Fleming

   Visible Impressions from World War II - Reality or Artistic Interpretation?  
      Cornelia Lüdecke
A Hole in the Sky? A Visual History of Ozone Depletion
Sebastian V. Grevsmühl

S29 Perspectives on the Rise of Climate Science
Organisers: Matthias Heymann and Robert Marc Friedman
Room: A5
Wednesday, 29 July, 15.00 – 17.00
Chair: Robert Marc Friedman
From Polar War and Cod Fishery to Global Climate Change
Maiken L. Lolek
Nuclear Arms, Cold War, and the Rise of Climate Science
Matthias Dörries
The Project of MECCA
Nils R. Hundebøl, Matthias Heymann

Wednesday, 29 July, 17.30 – 19.30
Chair: Matthias Heymann
Modeling Climate Prosperity
Vladimir Jankovic
How Global Warming Stimulated Ocean Research in Germany
Walter Lenz
Climate and Clientelism in Brazil
Christina H.M. Barboza

S31 Les Ingénieurs au Service des Princes et des États: Un Regard sur la Mobilité Professionnelle en Europe, XVe-XIXe Siècle
Organisers: Ana Cardoso de Matos, Irina Gouzévitch, André Grelon
Room: C5
Session I.: S’Expatrier pour se Former et s’Informer: Migration Entre la Formation et l’Action
Wednesday, 29 July, 15.00 – 17.00
Chair: Ana Cardoso de Matos
Les Ingénieurs pour le Risorgimento Italien: Une Contribution «Internationale» pour la Construction de la Nation
Renata de Lorenzo
L’État Libéral Portugais et la Formation à l’Étranger de Cadres Techniques Modernes (1851-1900)
Paulo Simões Rodrigues, Helena Souto
Trained in Europe to Serve the State: Preliminary Remarks on Ottoman Engineers of the 19th Century
Feza Günergun
Session II.: Pérégrinations et Expatriations: Parcours Classiques, Parcours d’Éception
Wednesday, 29 July, 17.30 – 19.30
Chair: Irina Gouzévitch

Aristocrates en Ecosse – Ingénieurs en Russie: la Famille Bruce au Service de la Couronne Russe, Fin XVIIe- Début XVIIIe Siècle
Irina Gouzévitch

Les Ingénieurs Français et Flamands et les Projets de Forteresses de l’Alentejo, Portugal, au XVIIe Siècle
Antónia Fialho Conde

Lamé et Clapeyron en Russie, 1820-1830
Margaret M. Bradley

Dzrewiecki (1844-1938): les Pérégrinations Européennes d’un Ingénieur Russo-Polonais
Claudine Fontanon

Between Europe and America. E. Terradas (1883-1950) and the New Engineering in Spain
Antoni Roca-Rosell

Session III.: Mise à Disposition des Compétences: le Travail des Experts dans les Pays Étrangers
Thursday, 30 July, 15.00 – 17.00
Chair: Irina Gouzévitch

Foreign Engineers in Spain and in the Ottoman Empire: A Comparative Study from a Long-Term Perspective (18th to Early 20th Century)
Darina Martykánová, Meltem Akbas

La Mission des Ponts et Chaussées en Grèce (1882-1886); un Corps National d’Ingénieurs pris dans des Rapports Économiques Internationaux
Anna Mahera

Sous le Signe de l’École des Ponts et Chaussées: João Evangelista de Abreu et les Chemins de Fer Portugais
Maria Paula Diogo

A Place for Foreign Specialists: French Agronomists and the Institutionalization of Agricultural Sciences in Brazil, 1870 – 1910
Graciela de Souza Oliver

Gaspard Monge et les Polytechniciens à Rome
Luigi Pepe

Les Ingénieurs Étrangers dans l’Industrie du Gaz et de l’Électricité au Portugal, 1850-1920
Ana Cardoso de Matos

Session IV.: La Remise en Question de la Mobilité Professionnelle: Crises et Nationalismes
Thursday, 30 July, 17.30 – 19.30
Chair: André Grelon

Les Ingénieurs de la Renaissance au Service du Grand Prince de Moscovie, ou les “Habits” Pour un État Unifié (Fin XVe - Début XVIe Siècles)
Dmitri Gouzévitch
S32 From Natural History to Biology, when Life Sciences were Looking for an Object
Organisers: Bernardino Fantini, Stéphane Tirard
Room: A5
Friday, 31 July, 17.30 – 19.30
Chair: Stéphane Tirard

La Biologie Végétale Durant la Deuxième Moitié du XIXe Siècle: de la Pratique au Laboratoire et Retour
Cristiana Oghinan-Pavie, Stéphane Tirard

Quelle R évolution Pasteurienne dans les Sciences du Vivant?
Gérard Jorland

La Naissance de la Zoologie en Belgique: Pierre-Joseph Van Beneden
Marie Claire S.Y. Van Dyck

La Réception du Transformisme dans les Milieux Catholiques à la Fin du XIXè Siècle
Olivier Perru

Saturday, 1 August, 09.00 – 11.00
Chair: Stéphane Tirard

La Question du Verdissement des Huitres: Observatoire Privilégié de la Transformation des Sciences de la Vie à la Fin du XIXème Siècle et au Début Du
Céline M.-L. Briée

Aux Origines d'une Science du Développement
Jean-Louis Fischer

S33 How Instruments Change Hands
Organisers: Sara J. Schechner, A. D. Morrison-Low
Room: A15
Thursday, 30 July, 15.00 – 17.00
Chair: Alison Morrison-Low

'Distinguished and Well-known to Princes and Lords': The Self-marketing of Early-modern Instrument-makers in Germany
Michael B. Korey

Symbiosis and Style: the Production, Sale and Purchase of Instruments in the Luxury Markets of Early Eighteenth Century London
Alexi S. Baker

Counterfeits, Copycats, and Knockoffs in the Branding and Selling of Scientific Instruments
Sara J. Schechner

Selling Surveying Instruments in America Before the Printed Trade Catalog
Richard Kremer

Thursday, 30 July, 17.30 – 19.30
Chair: Sara J. Schechner

The Gentle Art of Persuasion: Advertising Instruments During Britain's Industrial Revolution
Alison D. Morrison-Low

Selling by the Book: Scientific Trade Literature
Liba Taub, Joshua Nall

Mathematical Instruments Changing Hands at World’s Fairs, 1851-1904
Peggy A. Kidwell

The Economics of Instruments: Prices in Europe Between 1800 and 1914
Paolo Brenni

S34 Cold War Social Science: Transformations in Politics, Patronage, Disciplines, and Democratic Ideology
Organisers: Mark Solovey, Hamilton Cravens
Room: C4

Session I.: Social Science, Social Movements, and Social Reform
Thursday, 30 July, 15.00 – 17.00
Chair: Nadine M. Weidman

The Strange Career of Neo-Evolutionist Anthropology in the United States
Howard Brick

Nadine M. Weidman

Revolt Against The System: Radical Individualism and the American Social Sciences in the Age of the Cold War 1945-2000
Hamilton Cravens

Session II.: Disciplinary Transformations
Thursday, 30 July, 17.30 – 19.30
Chair: Joel Isaac

Cold War Modern? Shapes of Knowledge in Harvard’s Department of Social Relations
Joel Isaac

Producing Reason
Hunter A. Heyck

The Birth of a Movement: Joy Paul Guilford and Creativity Research in American Psychology, 1950-70
Michael Trevor Bycroft
Session III.: Social Theory and Democratic Ideology
Friday, 31 July, 11.30 – 13.30
Chair: Jefferson D. Pooley

- International Influences and Interpretations of Futures Studies
  Kaya Tolon

- Gemeinschaft After All: The Frontstage and Backstage of Small Group Research in Early Cold War Social Science
  Jefferson D. Pooley

- Somewhat Known but Not Known Well: Sociologist Harry Alpert’s Travels in American Social Science
  Mark Solovey

- American Foundations and Socio-economic Research in Italy: A Long-term Analysis
  Giuliana Gemelli

Session IV.: The Human Machine in Cold War Social Science
Friday, 31 July, 15.00 – 17.00
Chair: Edward Jones-Imhotep

- Cold War Emotions: Mother Love and Human Nature in Post-War America
  Marga Vicedo

- Maintaining Humans
  Edward Jones-Imhotep

- The Most Advanced of All Social Sciences?: Linguistics in Cold War America
  Janet Martin-Nielsen

S35 History of Numerical Tables – The Second Meeting on History of Exact Sciences along the Silk Road
Organisers: Dominique Tournès, Anjing Qu
Room: B2

Session I.: Tables in Antiquity
Tuesday, 28 July, 11.30 – 13.30
Chair: Zhigang Ji

- From Square Tables to Calculation of Surfaces in Mesopotamia
  Christine Proust

- Fractional Tables and Water Clocks in Egypt
  Micah T. Ross

- From Lists to a Table to Manage Grains: The Evidence from the Oldest Extant Chinese Mathematical Books
  Karine C. Chemla, Biao Ma

Session II.: Tables and Astronomy
Tuesday, 28 July, 15.00 – 17.00
Chair: Alexander Jones

- The Function of Numerical Tables in the Mathematical Structure of Ptolemy's /Almagest/
  Nathan Sidoli
The Numerical Model of Chinese Planetary Theory
Anjing Qu

The Precision of the Planetary Calculation in the Song Dynasty
Quan Tang

Mercure et le Second Équatoire de Jean de Lignières
Matthieu Husson

Session III.: Tables and Arithmetic
Tuesday, 28 July, 17.30 – 19.30
Chair: Karine C. Chemla

Comments on the Numerical Tables and Algorithms in Fibonacci’s Liber Abaci
Zhigang Ji

Cardano’s Rule of Proportional Position in Artis Magnae
Jiwei Zhao

Earliest Factor Tables
Maarten Bullynck

Une Étude Empirique de Georg Cantor
Anne-Marie Decaillot

Session IV.: Tables and Engineering in the 19th Century
Wednesday, 29 July, 09.00 – 11.00
Chair: David Aubin

Euler-Otto’s Ballistic Tables
Dominique Tournes

Instruments Versus Tables dans le Calcul des Déblais et Remblais dans la France des Années 1830-1860
Konstantinos Chatzis

Mathematics, Analysis, and Mechanisation in Great-Britain (1834-1934)
Marie-José J. Durand-Richard

Session V.: Tables and Engineering in the 20th Century
Wednesday, 29 July, 11.30 – 13.30
Chair: Dominique Tournes

The Relationship between Numerical and Graphical Methods in the First Half of the 20th Century
Renate A. Tobies

The Design of Numerical Tables for Statistical Quality Control in Industry (1920-1950)
Denis Bayart

"Why Might a Mathematician Want to Add Pulse Circuitry to Pencil and Paper?"
Liesbeth De Mol
S36  Introduction of Modern Mathematics in Iberoamerica  
Organisers: Alejandro R. Garcíadiego, Sergio Nobre, Clara H. Sánchez  
Room: A4

Saturday, 1 August, 11.30 – 13.30  
Chair: Sergio R. Nobre

- The Translation into Spanish of Kurt Grelling's Theory of Sets  
  Alejandro Garcíadiego
- Introduction of Set Theory in Colombia  
  Clara Helena Sánchez Botero, Víctor Albis
- Logic and Set Theory in Primary and Secondary Education in Spain  
  Elena Ausejo
- Hilbert's "Grundlagen der Geometrie" Translated into Spanish: A Case of a Famous Mathematical Text and its Contexts  
  Leo Corry

Saturday, 1 August, 15.00 – 17.00  
Chair: Alejandro Garcíadiego

- Mischa Cotlar's First Studies on Measure and Integration Theory (1939-1944)  
  Luis C. Arboleda, Carlos D. Galles
- The Impact of Antonio Monteiro on the Establishment of Algebraic Logic in Latin America  
  Eduardo Ortiz
- Sur Une Contribution de Pi Calleja au Problème d'Induction et Récursivité dans les Axiomes de Peano pour les Nombres Naturels  
  Luis Carlos Arboleda
- A Brasilian Genealogy of the Mathematics from Luigi Fantappiè  
  Plínio Zornoff Táboas

Saturday, 1 August, 17.30 – 19.30  
Chair: Clara Helena Sánchez Botero

- The Birth of the Research in Mathematics Inside the State of São Paulo - Brazil  
  Sergio R. Nobre
- Intuition, Formalism, and Purity in Brazilian Mathematics  
  Rogério Monteiro de Siqueira
- On the Development of Paraconsistent Logic and the Brazilian School of Logic  
  Itala M.L. D'Ottaviano
- Some Historical Considerations on the Paraconsistent Logic in Brazil  
  Carlos Roberto Moraes

S37  Science, Politics, and Development in the 20th Century  
Organisers: Olival Freire Junior, Patrick Petitjean, Alexis de Greiff  
Room: C2

Session I:  Politics and Scientific Internationalism  
Wednesday, 29 July, 15.00 – 17.00  
Chair: Olival Freire

- UNESCO in the 50s: From the Periphery Principle to Technical Assistance  
  Patrick Petitjean
International Scientific Activity in an Autarchic and Isolated Regime: The Origins and Constitution of Particle Physics in Spain
Agustín Ceba Herrero, Jorge Velasco González

The Technical and Scientific Activities of the Office of Inter American Affairs (1940-1946)
Alexis De Greiff

The Exact Sciences and Politics in Argentina, Brazil, Portugal, and Spain in the Immediate Post-war Years: Common Features and Differences
Eduardo Ortiz

Session II.: Science and Development in 20th Century Ibero-America I.
Wednesday, 29 July, 17.30 – 19.30
Chair: Patrick Petitjean

Scientific Development Under Military Dictatorship: The Case of Brazilian Physicists (1964-1985)
Olival Freire

A New Look at an Old Devil: A Democratic Computer Market Reserve During an Authoritarian Dictatorship
Ivan da Costa Marques

Scientific Policies in Portugal During the Dictatorial Regime and the Physics and Genetics Communities (1929-1954)
Júlia Gaspar, Maria do Mar Gago, Ana Simoes

Shaping Scientific Communities in Francoist Spain, 1939-1967
Antoni Malet

Session III.: Science and Development in 20th Century Ibero-America II.
Thursday, 30 July, 15.00 – 17.00
Chair: Alexis de Greiff

Les Agronomes Sylviculteurs et les Politiques Forestières des Années 1930-1960 au Brésil
Diana Antonaz

Historical Notes on the Geophysics in Brazil – Petrobrás and the National Development
Aurino Ribeiro Filho, José Eduardo Clemente

The Mathematician Norberto Cuesta Dutari Recovered from Oblivion
José M. Pacheco

The Rebirth of a «Scientific Movement» and the Foundation of the National Board of Education in the First Period of Portuguese Dictatorship
Emília V. Gomez, Augusto J.S. Fitas, Fátima Nunes

Session IV.: Institutions for Science and Development
Thursday, 30 July, 17.30 – 19.30
Chair: Patrick Petitjean

Science and Social Inequality: Caste and Gender in Modern Physics in India
Abha Sur
Personal Motivation in the Creation of the First Profession and Research Institutions of Physics in Mexico
Maria Ramos

Helôisa M. Bertol Domingues

S38 Marxism and 20th Century Natural Science
Organisers: Anja Jacobsen, Alexei Kojevnikov, Masakatsu Yamazaki, with the participation of Olival Freire Junior
Room:A15

Saturday, 1 August, 09.00 – 11.00
Chair: Anja Jacobsen

Marx’s Appeal to Dutch Scientists
Leo P. Molenaar

Vygotsky, Blonsky and Marxist Psychology in Soviet Russia
Alexander Dmitriev

Soviet Marxism and Scientism
Alexei B. Kojevnikov

Re-examination of the Disputes Over the Interpretation of Physical Theories in Pre-War Soviet Russia: From the Philosophical Viewpoint
Koji Kanayama

Saturday, 1 August, 11.30 – 13.30
Chair: Alexei Kojevnikov

Foundations of Quantum Theory and Marxism: Rosenfeld Versus Bohm
Anja Skaar Jacobsen

Le Lysenksime et la Conceptualisation de la Science Prolétaire
Deniz Uztopal

The Impact of the Soviet Genetics Controversy on Japan from the Late 1930s to the Early 1950s
Hirofumi Saito

Marxism as a Useful Tool: Japanese Particle Physicists
Masakatsu Yamazaki

Saturday, 1 August, 15.00 – 17.00
Chair: Masakatsu Yamazaki

Rejection and Acceptance of Plate Tectonics: Stalinism and the Japanese Geological Community
Jiro Tomari

Marxist Philosophy and Natural Science in the Last Days of the USSR
Paul Josephson
S39 Early Modern Conversations between Science and the World’s Religions
Organisers: Scott Gerard Prinster, Efthymios Nicolaidis
Room: A8

Friday, 31 July, 17.30 – 19.30
Chair: Ekmeleddin Ihsanoglu

The Heresy Prosecution of Renaissance Scholars Domenico Scandella, Giordano Bruno, and Galileo Galilei
Scott G. Prinster

Oswald Croll's “De signaturis internis rerum”: A Theory of Pharmacognosy at the Crossroads of Tradition and Modernity
Fabienne Gallaire

The Atmosphere as Physical Mirror of the Society – The Case of Jean André Deluc (1727-1817)
Marita Hübner

Laplace’s Private Religious Discomfort
Roger Hahn

The Scientific Revolution and the Two Faces of Augustinianism
Rob Iliffe

The Scientific Revolution and the Eastern Orthodox Church
Efthymios Nicolaidis

S40 Visual Representations in Science and Pseudo-Science in Pre-Modern and Non-Western Cultures
Organisers: Alexei Volkov, Vera Dorofeeva-Lichtmann
Room: A14

Session I.: Pre-modern Cartography
Friday, 31 July, 11.30 – 13.30
Chair: Alexei Volkov

Maps of Chinese Empire in East Asian Cartographic Traditions: An Attempt at a Typology
Vera Dorofeeva-Lichtmann

The Representation of Japanese Islands on European Maps
Ekaterina Simonova-Gudzenko

Map Behind the Mask of a Talisman: The Taoist Diagram of the “True Form of the Eastern Sacred Mountain Tai”
Sheng Jiang

Session II.: Diagrams in Pre-modern Science
Friday, 31 July, 15.00 – 17.00
Chair: Vera Dorofeeva-Lichtmann

Diagram and Algebraic Equations in Chinese Mathematics of the 13th Century: The Example of the Yigu yanduan by Li Ye
Charlotte V. Pollet
A Survey of Geometrical Figures in Korean Mathematical Texts in 17th to 19th Centuries
Jia-Ming Ying

Astronomy and Astral Divination in Early Medieval Japan
Kam-Wing Fung

Session III.: Talismans and Pseudo-medical Diagrams
Friday, 31 July, 17.30 – 19.30
Chair: Kam-Wing Fung

Mapping the Body in Early Medieval Daoism: Visualization of Deities in the Laozi Zhongjing
Alexandre Iliouchine

The Talismanic Tableaux of the Masters of Psalmodia: Between Writing and Image in China
Aurélie Névat

Talismans and Diagrams in the Manuscripts of the Minority Nationalities of Northern Vietnam
Alexei K. Volkov

S41 Ideas and Instruments in the Iberian World in Early Modern Times (15th to 17th Century)
Organisers: Víctor Navarro Brotons, Henrique Leitão
Room: A4
Tuesday, 28 July, 11.30 – 13.30
Chair: Susana Gómez

Portuguese Cosmography in Sixteenth-Century Florence. Portuguese Maps in the Grand-Ducal Collections: Their Use, Influence and Legacy
Angelo Cattaneo

The Magnetic Variation and the Variation Compass in Portuguese Navigation Techniques, XV to XVIII Centuries
José Malhão Pereira

Mathematical Diagrams and Other Theoretical "Instruments" in 16th Century Nautical Science
Henrique Leitão

Víctor Navarro Brotons

Tuesday, 28 July, 15.00 – 17.00
Chair: Henrique Leitão

Cosmography and Astrology in Manila: Tracing an Intellectual Network in the Iberian Colonial World
Ana Avalos

Clavius, Coignet, Galileo, Gunter: the European Discussion About the Sector in Lisbon
Samuel Gessner
Instruments for Learning. The Practice of Astrology and Astrological Discs
Tayra M.C. Lanuza-Navarro

Instruments Employed by Master Esquivel to Create the Map of Spain (c. 1555)
Isabel Vicente, Antonio Crespo

Tuesday, 28 July, 17.30 – 19.30
Chair: Víctor Navarro Brotons

Mathematical Instruments in the Spanish Artillery Treatises, 1530-1700
Mariano Esteban Piñeiro

New Worlds and Old Languages: The Problem of the Transmission of Knowledge in Utopian Literature
Susana Gómez

José Zaragozá and the Scientific Renewal in 17th Century Spain: Ideas, Instruments, and Practices
Eduard Recasens

S42 The Emergence of the Periodical Form (17th-18th Centuries) as an Instrument of Scientific Change
Organisers: Jeanne Peiffer, Maria Conforti, Fernando Reis, Iordan Avramov
Room: B3

Wednesday, 29 July, 15.00 – 17.00
Chair: Fernando Reis

Advancing the Baconian Science? ‘Queries for Natural History’ in the Early Philosophical Transactions and the Correspondence of Henry Oldenburg
Iordan V. Avramov

Cristina Dessì

Testimonial Forms of Scientific Knowledge Presentation
Simone De Angelis

Mathematical Instruments in the Seventeenth-century Journal des Savants
Jeanne Peiffer

Wednesday, 29 July, 17.30 – 19.30
Chair: Maria Conforti

Beyond Instructions. Scientific Instruments in Early Modern Italian Periodicals
Maria Conforti

Notes on Advertising Microscopes in the Seventeenth Century Italy.
Michela Fazzari

About the Scientific Discourse in the Kaiserlich-königlich Privilegirten Anzeigen
Ágoston Zénó Bernád
A Veil of Ignorance: Anonymity and Promotion of Self in the Eighteenth-Century Republic of Letters
Mathias Persson

Thursday, 30 July, 15.00 – 17.00
Chair: Jeanne Peiffer

Disseminating the Sciences to the Portuguese Readers in Late Eighteenth-century Periodicals
Fernando E. Reis

Jacopo Riccati Organizer of Mathematics Knowledge and Advanced Research in Italian Journals of 18th Century
Clara Silvia Roero

Vulgariser le Mesmérisme: le Magnétisme Animal dans les Périodiques Italiens au XVIIIe Siècle
Patrizia Delpiano

Les Observations sur la Physique et les Questions Agricoles Entre 1771 et1779
Paul M.M. Robin

Thursday, 30 July, 17.30 – 19.30
Chair: Silvia Roero

Fonction et Statut de la Traduction dans le Journal des Scavants
Georgette Stefani-Meyer

Communicating Swedish Science in German: The Periodicals of Swedish-Pomerania
Andreas Önnerfors

S43 Science, Space, and Claims to European Domination – The Dynamics of Knowledge from the Renaissance through the Enlightenment
Organisers: Catherine Jami, Laszló Kontler, Antonella Romano
Room: B2

Friday, 31 July, 17.30 – 19.30
Chair: Antonella Romano

European Scientific Mission in China Seen From Mexico: Challenging European Domination from the “Periphery”
Antonella Romano

New Knowledge on the New World and the Shaping of Historical Discipline: Provincializing the Enlightenment
Silvia Sebastiani

Relevant Knowledge on the Margins: Maximilian Hell and the Eighteenth-century Astronomers’ Republic
Laszló Kontler

Herder’s Travels: Language, Sociability, and the Concept of the Nation
Anthony LaVopa
Useful Knowledge and Academic Reform in Hungary at the End of the Eighteenth Century
B. Zsuzsanna Török

Erudition as Epistemic Culture: Ideals, Strategies, Practices
Hans Erich Boedeker

S44 The Transmission of Modern Scientific Knowledge from the West to China
Organisers: Baichun Zhang, Yibao Xu
Room: A5

Saturday, 1 August, 11.30 – 13.30
Chair: Baichun Zhang

Expeditions of the Russian Academy of Sciences and Studying of China in the First Half of the Nineteenth Century
Tatiana Y. Feklova

Galileo's Military Compass in China
Yibao Xu

Westernization of Mathematics Education in China: Calvin Wilson Mateer's Work
Yi Han

Development of Mathematical Education and the Professionalization of Chinese Mathematicians During 1860-1904
Miao Tian

Saturday, 1 August, 15.00 – 17.00
Chair: Yibao Xu

The Transmission of Western Mechanics into China in the Seventeenth Century
Baichun Zhang, Miao Tian, Matthias Schemmel

The Modernization of Chinese Industry Via Meiji Japan
Jian Yang

The Academic Activities of the Chinese Physicists in Europe from 1920s to 1950s
Xiaodong Yin

Animadversion on the Quantum Mechanical Viewpoints of the Copenhagen School in China from 1950s to 1970s
Huakai Hu

S45 The Antikythera Mechanism and its Place in the History of Science, Technology and Ideas
Organisers: Alexander Jones, Yanis Bitsakis
Room: A1 (on Friday) and B2

Session I.: Discovery and Background
Friday, 31 July, 17.30 – 19.30
Chair: Mike Edmunds

Opening
Mike Edmunds, Alexander Jones
The Antikythera Shipwreck, the Treasure and the Fragments of the Mechanism
Mary Zafeiropoulou, Panagiotis Mitropoulos

Prerequisites for the Antikythera Mechanism to be Constructed in the 2nd Cent BCE
Theodosios Tassios

The Antikythera Mechanism, the First Mechanical Universe
Xenophon Moussas, Dionysios Kriaris

Discussion

Session II.: The Mechanism
Saturday, 1 August, 09.00 – 11.00
Chair: Mike Edmunds

The Antikythera Mechanism: An Instrument of Mathematical Astronomy
Tony S. Freeth

A Practical Approach to Studying the Antikythera Mechanism
Michael T. Wright

A New Model of the Antikythera Mechanism
Kyriakos Efstatthiou, Theodora Zacharopoulou, Magdalini Anastasiou, John-Hugh Seiradakis

The Solar Anomaly and the Venus Display on the Antikythera Mechanism
James C. Evans

Saturday, 1 August, 11.30 – 13.30

Discussion

Session III.: The Inscriptions
Chair: Alexander Jones

The Inscription on the Antikythera Mechanism
Yanis Bitsakis, Agamemnon Tselikas, Alexander Jones

The Front Cover Plate of the Antikythera Mechanism
Agamemnon Tselikas, Yanis Bitsakis

The Eclipse Inscriptions within the Context of Ancient Astronomy
John M. Steele

Discussion

Saturday, 1 August, 15.00 – 17.00

The Parapegma of the Antikythera Mechanism
Tony Freeth

Astronomical Implications of the Parapegma of the Antikythera Mechanism
Magdalini Anastasiou, John-Hugh Seiradakis

The Antikythera Parapegma in Context
Daryn Lehoux

Discussion
Session IV.: The Mechanism in Context  
Chair: Theodossios Tassios

Mechanics, Thought, and the Marketplace – The Antikythera Mechanism in Context  
Michael G. Edmunds

Saturday, 1 August, 17.30 – 19.30

Instructions for the Instrument-Maker? Ptolemy’s Planetary Hypotheses and Mechanical Representations  
Elizabeth Burns

A Comparison Between the Astrolabe and the Antikythera Mechanism  
Flora Vafea

Une Fille d’Anticythère: La Calotte Zodiacale de Chevroches et ses Cousins Bourguignons  
Frédéric Devevey, Christian Vernou, Patrice Cauderlier

The Inscriptions of the Disc of Chevroches into their Context  
Patrice Cauderlier

Discussion

S46 National Funding of Biomedical Research  
Organisers: Giuliana Gemelli, Jean-François Picard, William H. Schneider  
Room: A3

Tuesday, 28 July, 11.30 – 13.30
Chair: William H. Schneider

From Private Initiative to Public Government Funding of Medical Research and Public Health in Italy: Opportunities and Constraints  
Giuliana Gemelli

The Medical Research Council in Britain: Science, Utility and Politics Since 1913  
John V. Pickstone

The First Medical Research Institute in China: The North Manchurian Plague Prevention Service  
Daqing Zhang

The Meeting of Medicine and Biology in France: Success and Limits of Political Planning  
Jean-François Picard

Tuesday, 28 July, 15.00 – 17.00
Chair: Giuliana Gemelli

The Birth of the Fight Against Cancer in Europe: The Case of EORTC  
Bertrand Dargelos

Internal and External Influences on the Establishment of the NIH Extramural Funding Program in the United States  
William H. Schneider
Shaping Scientific Research with Decisions Not to Fund: The U.S. Government and Human-Embryo Research
Doris T. Zallen

Researching Public Health in the Age of Biomedicine: Population-Based Science and Expertise in France and Britain (1940s-1980s)
Luc Berlivet

S47 Letters at War – Scientific Controversies in the Correspondences of the 17th and 18th Century
Organisers: Anne-Lise Rey, Siegfried Bodenmann
Room: A13

Tuesday, 28 July, 11.30 – 13.30
Chair: Siegfried Bodenmann

The Interplay Between the Private and the Public Dimensions in 17th and 18th Centuries Scientific Debates
Marcelo Dascal

Geometrization or Mathematization: Christian Huygens' Critiques on Infinitesimal Analysis
Fabien Chareix

Routine Controversies: Mathematical Challenges in Early Modern France
Catherine Goldstein

La Controverse Entre G. W. Leibniz et Denis Papin: de la Polémique Publique à la Correspondance
Anne-Lise Rey

Tuesday, 28 July, 15.00 – 17.00
Chair: Jean-Pierre Schandeler

Anatomie d'une Controverse Épistolaire: la « Correspondance » Leibniz-Clarke (1715-1716)
Philippe Hamou

Le Rôle des Correspondances dans la Querelle de la Circulation Sanguine
Claire E. Crignon-De Oliveira

Correspondre avec Son Médecin à l'âge des Lumières: débats et contestations
Vincent Barras, Séverine Pilloud

Enlightened Controversies or Controversies in the Enlightenment? Albrecht von Haller versus Coschwitz and La Mettrie
Rainer Godel

Tuesday, 28 July, 17.30 – 19.30
Chair: Anne-Lise Rey

La Violence sous le Verbe Académique. Aspect Rhétorique d'un « Débat » sur la Certitude en Histoire à l’Académie des Inscriptions et Belles-lettres au XVIIIe Siècle
Jean-Pierre Schandeler
Spreading the Word: Reporting an Eighteenth-Century Controversy About Lightning Rods
Roderick W. Home

Une Réconciliation Controversée de Séléné et Newton: Clairaut, d’Alembert, Euler et la Théorie de la Lune
Siegfried Bodenmann

Final Discussion
Anne-Lise Rey, Siegfried Bodenmann

S48  Networks of Instrumentation in the Neurosciences
Organisers: Jean-Gaël Barbara, Cornelius Borck
Room: A10

Friday, 31 July, 11.30 – 13.30
Chair: Jean-Gaël Barbara

Technical Advances in Neurochemistry: Histofluorescence and Immunohistochemistry
Claude A. Debru

A Fine Balance: The Cultural Implications of Indirect Measurement
Gabriel Finkelstein

Action Potentials and the “Digitization” of the Nervous System by European Scientists Between 1900 and 1950
François Clarac

The PPI Network: From Spiritual Brain to Future Antipsychotics?
Nicolas Langlitz

Friday, 31 July, 15.00 – 17.00
Chair: Cornelius Borck

Epilepsy, a Disease Between the Fields of Clinics and Surgery in the Twentieth Century
Celine Cherici

Electric Fish Discoveries in Modern Age: Complex Networks of Scientific Endeavour and Historical Intracies.
Marco Piccolino

From Leipzig to Cambridge, from Wundt to James: Hugo Münsterberg and his Laboratories for Experimental Psychology
Henning Schmidgen

 Travels of a Bioassay: The Eserinized Leech Muscle in Henry Dale's Lab and Beyond
Tilli Tansey

Friday, 31 July, 17.30 – 19.30
Chair: Cornelius Borck

Ex-radar Folk with Biological Leanings’: Models, Electronics, and the Nerve Impulse at WWII
Max Stadler

What was in their Luggage? German Refugee Neuroscientists and the Emergence of Interdisciplinary Research Networks in North-America, 1933-1963
Frank W. Stahnisch
S49 Mediators of Sciences. Women Translators of Scientific Texts, 1600-1850 – Mediatrices de Sciences. Femme Traductrices de Textes Scientifiques, 1600-1850
Organisers: Patrice Bret, Brigitte Van Tiggelen
Room: A3

Wednesday, 29 July, 09.00 – 11.00
Chair: Patrice Bret

Women Translators in 19th Century Greece: The Case of "Ladies' Newspaper" and "Estia"
Poly Giannakopoulou

Transforming the Text: Translation Practices of the Philosopher, Emilie Du Chatelet
Judith P. Zinsser

Mariangela Ardinghelli: Poetry and Electricity in 18th-century Naples.
Corinna Guerra

Mme Thiroux d’Arconville and the Uses of Translation: Anonymity, Autonomy, and Authorship in Women's Contribution to Chemistry in the XVIIIth Century
Brigitte R.P. Van Tiggelen

Wednesday, 29 July, 11.30 – 13.30
Chair: Brigitte R.P. Van Tiggelen

Madame Lavoisier, une Negociatrice de la Republique des Lettres
Keiko Kawashima

Women Translating Science in the Spanish Enlightenment
Elena Serrano

Mme Picardet and the Translation of European Chemistry at the End of the Eighteenth Century
Patrice Bret

God in Translation: Mary Somerville and the Moral Guardianship of Science
Michal Meyer

S50 Plants as Ideas and Instruments: A Symposium in Memory of Philip J. Pauly
Organisers: Barbara Kimmelman, Harro Maat
Room: A6

Session I: Plants as Ideas of Culture and Taste
Wednesday, 29 July, 09.00 – 11.00
Chair: Barbara Kimmelman

In the Name of the Bourgeoisie. Early Belgian Plant Collectors in America (1830-1865)
Denis J.N. Diagre

Seeds of Wealth: The Changing Life of Cotton Plants in Nineteenth Century Western India
Sandip K. Hazareesingh
Christophe Bonneuil, Philip Thurtle

A Taste for the Spoils of Empire: David Fairchild and American Plant Cosmopolitanism
Barbara A. Kimmelman

Session II: Plants as Instruments of Public Policy
Wednesday, 29 July, 11.30 – 13.30
Chair: Harro Maat

What Has Been Learned from Past Green Revolutions?
Jonathan Harwood

The Co-Evolution of Potatoes and Pigs and the Political Economy of Nazism
Tiago Saraiva

Instrumental Thinking About the Genotype and Phenotype of IRRI’s High Yielding Rice Varieties
Harro Maat

Botanical Education: Contested Territories in Public Education 1900-2000
Dawn Sanders

S51 For Better or for Worse? Collaborative Couples in the Sciences
Organisers: Brigitte Van Tiggelen, Annette Lykknes
Room: A3
Friday, 31 July, 11.30 – 13.30
Chair: Brigitte Van Tiggelen

Changing Strategies for Collaborative Couples in the Sciences
Nancy G. Slack

The Allocation of Scientific Credit to Collaborative Couples: The Lederbergs and the 1958 Nobel Prize in Physiology
Pnina Geraldine Abir-Am, Christina C. Luo, Pinar A. Ozisik

Ida and Walter Noddack: A Collaborating Couple in Chemistry
Brigitte Van Tiggelen, Annette Lykknes

Invisibility and Partnership: Families in Early Twentieth Century Swedish Science
Staffan R. Bergwik

Friday, 31 July, 15.00 – 17.00
Chair: Annette Lykknes

Scientific Couples in Hungary
Éva Vámos

Married for Science: Success and Failure in the Collaboration Between Astrid Cleve and Hans von Euler-Chelpin, 1902–1912
Kristina Espmark

Science at Terling: Placing Collaboration in the Context of the Victorian Country House
Donald L. Opitz

Pioneering Couples in Chemistry and in its Popularisation
Jean-Jacques Dreifuss, Natalia Tikhonov
**S52  Formation of Experimentation in Plant Sciences from 18th to 19th Centuries**  
Organisers: Brigitte Hoppe, Nicolas Robin  
Room: A15  

**Friday, 31 July, 11.30 – 13.30**  
Chair: Brigitte Hoppe  

- **Studies on the Balsams in the 18th Century: A Modern Experimental Approach**  
  Marcia H.M. Ferraz, Ana M. Alfonso-Goldfarb, Silvia I. Waisse de Priven

- **Plants, Private Estates and Public Assistance: Formation of Plant Breeding Experimentation in Russia, 18th – 19th Centuries**  
  Olga Yu. Elina

- **From Experimentation on Plants to an Experimental Analysis of Plants in Early Electrophysiology**  
  Brigitte Hoppe

**Friday, 31 July, 15.00 – 17.00**  
Chair: Nicolas Robin  

- **18th Century Utilitarian Botany and the Manufacturing of Potash in Colonial Brazil**  
  Fernando J. Luna de Oliveira

- **The Experimental Discovery of the Nature of Plants – The Empirical Spirit of the Scientific Revolution**  
  Nicolas Robin

- **The Human Instrument in the 18th Century Laboratory**  
  Larry Stewart

**S53  Communicating Science in 20th Century Europe: Comparative Perspectives**  
Organisers: Arne Schirrmacher, Leszek Zasztowt  
Room: A14  

**Session I.: 20th Century Publishing Phenomena**  
Tuesday, 28 July, 11.30 – 13.30  
Chair: Arne Schirrmacher  

- **New Initiatives in Popular Science Publishing in Early Twentieth-Century Britain**  
  Peter J. Bowler

- **Two Models or One? Popularization of Science in Poland Before and After the Collapse of the Soviet Bloc**  
  Jarosław Włodarczyk

  Oliver Hochadel
Session II.: Science Communication as Political Tool

The Political Background of Polish and Soviet Science Popularization in the Post-war Period
Leszek Zasztowt

Tuesday, 28 July, 15.00 – 17.00
Chair: Christine Blondel

Public Policies of Publicisation of Science in post-war France. Toward a "State Affair"
Andrée Bergeron

Session III.: Science Imprints: Science Content and Genres of Newspapers, Journals, Books

A Comparative Approach to the Representations of Science and Technology in the Portuguese Press at the Beginning of the 20th Century
Ana Simões, Ana Carneiro, Maria Paula Diogo

Science and Technology in the Early-20th Century Greek Daily Press
Erini Mergoupi-Savadiou, Faidra Papanelopoulou, Sypros Tzokas

The Popularization of Science in Hungary, 1867-1945: Textbooks, Media, Personalities
Tibor Frank

Session IV.: Beyond Print: Science Communication in the Early Audio-visual Age

Tuesday, 28 July, 17.30 – 19.30
Chair: Peter J. Bowler

Science Programs as Integral Part of Weimar and Post-war German Radio
Arne Schirrmacher

Science in the French Popular Media in the 1930s and 40s: From Radio to Movies, Songs, and Cabaret
Daniel Raichvarg

Session V.: New Perspectives in Popular Science Studies

General Discussion

S54 Sources of East Asian History of Science, Technology, and Medicine
Organisers: Paul U. Unschuld, Paul D. Buell, Christopher G. Muench (Germany/USA/USA)
Room: B3

Friday, 31 July, 11.30 – 13.30
Chair: Paul D. Buell

Textual Sources of the Traditional Chinese Life Science Feng Shui
Manfred Kubny

“Mister Chen’s Instructions on the Inner Cinnabar”: A Source for Transformation
Rudolf Pfister
A Source for the Cosmopolitan Medicine of the Mongol Era: Huihui Yaofang  
Paul D. Buell

The Significance of Research on Ancient Chinese Medical Literature Preserved Not in Chinese Archives but in Foreign Libraries Only  
Jinsheng Zheng, Zhibin Zhang

Friday, 31 July, 15.00 – 17.00  
Chair: Paul D. Buell

Michael Boym, Le Chéron d'Incarville and João Loureiro – Three Important Sources in the History of Botany of China  
Manuel S. Pinto, Noel Golvers

Manchu Texts on Natural Science in the Early Qing Period: The Manchu Anatomy and other Manchu Books on Mathematics and Medicine  
Junsei Watanabe

Sources, Content and Influence of the Book "Les Secrets de la Médecine des Chinois" (1671)  
Eric Marié

A New Realm of Sources for Chinese Medical Historiography. The Chinese Medical Manuscripts of the 16th to the 20 Century in Two Collections in Berlin  
Paul U. Unschuld

Friday, 31 July, 17.30 – 19.30  
Chair: Paul U. Unschuld

New Perspectives on Late Imperial Medical Texts  
Angelika C. Messner

Chinese Medical Practice on the Western Frontier: A Case Study in Adaptation  
Christopher Muench

S56 Communities and Communication in East Asian Sciences  
Organisers: Catherine Jami, Christopher Cullen  
Room: D1

Wednesday, 29 July, 09.00 – 11.00  
Chair: Michele Thompson

Searching for the Community of ‘Astronomers’ in Early Imperial China  
Cullen Christopher

Scholars, the State, and the Circulation of Mathematical Knowledge in Early Qing China (1644-1735)  
Catherine Jami

The Emergence of Literati Mathematicians and the New Culture of Mathematics in Late Eighteenth-century Korea  
Jongtae Lim

Medical Networks and Circulation of Knowledge in the Margins of the Qing Empire (1644-1911)  
Florence Bretelle-Establet
Wednesday, 29 July, 11.30 – 13.30
Chair: Catherine Jami

Who Were the First Generation of ‘Statisticians’ in Early 20th Century China
Andrea Bréard

Science, Nationalism, and Internationalism in Early 20th Century China
Fa-Ti Fan

Gia Truyen and Arapprochement Within the Healing Community in Vietnam
Michele Thompson

National Academy of Peiping and Scientists Trained in France
Xiao Liu

Wednesday, 29 July, 15.00 – 17.00
Chair: Christopher Cullen

Continuity/Discontinuity and Changing Agents of Japan’s Colonial Sciences
Togo Tsukahara

Community Building and Transmission of Knowledge: The Case of Quantum Physics in Japan
Kenji Ito

Precious Few: East Asian Nobel Laureates in Science in the Twentieth Century
Dong-Won Kim

Wednesday, 29 July, 17.30 – 19.30
Chair: Togo Tsukahara

Identifying “Local Area Doctors”: TKM (Traditional Korean Medicine) Practitioners and Disease under the USAMGIK, 1945-1948
John DiMoia

Constructing the Community of Radiation Medicine in Post-war Japan: Communication Between Japanese and American Scientists
Aya Homei

Leaping from Theory to Practice: Mathematics in China in the Late 1950s
Jiri Hudecek

S57 Meanings of “Science” in Twentieth and Twenty-First Century East Asia
Organisers: Angelika C. Messner, Bridie Andrews Minehan
Room: A4

Saturday, 1 August, 09.00 – 11.00
Chair: Angelika C. Messner

Linking Chinese Crafts to Global Contexts – The Research Objective of Zhu Qiqian
Martin Hofmann

Dress Pattern Books and the Diffusion of Western Tailoring Techniques in Maoist China
Iris Hopf
Reference to Science in the Life-Stories of Senior Chinese Medicine Practitioners in the PRC
Lena Springer

Sentimental Education in Scientific Terms
Angelika C. Messner

Meanings of 'Becoming Scientific' in Republican and Early Communist China
Bridie Andrews Minehan

S58 Iron Curtains and Immaterial Instruments – The Circulation of Software and Computer Science in Cold War Europe
Organisers: Gerard Alberts, Maria Bardosova, Helena Durnova, Thomas Misa
Room: A10

Tuesday, 28 July, 11.30 – 13.30
Chair: Maria Bardosova

The Feedback of Fear: American and Soviet (Mis)Perceptions of the Other Side's Cybernetics Agenda
Slava Gerovitch

Computing in Russia Before and After 1991
Paul Josephson

When the Iron Curtain Leaked: Tracking Eastern European and Soviet Influences upon Belgian Computing History
Sandra C.M. Mols, Marie D’Udekem-Gévers

Jacek Karpiński – A Polish Bill Gates?
Izabela Bondecka-Krzykowska, Anna Ren-Kurc, Marlena Solak

Tuesday, 28 July, 15.00 – 17.00
Chair: Thomas J. Misa

Vladimír Vand and Scientific Computing
Alena Solcová, Michal Křížek

Seeing Like a State? The "Functional Programming Systems" in the Central Planning Economy of East Germany
Simon Donig

Reasons for the Failure of Soviet Estonian Computer Project Juku
Laur Kanger

Tuesday, 28 July, 17.30 – 19.30
Chair: Gerard Alberts

Science and Politics Intertwined: Slovak Computing in the International Context
Maria Bardosova

Turning Programming Language into Working Technology: Compiler Construction at the Amsterdam Mathematical Centre, 1960
David Nofre, Gerard Alberts

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Western Effort, International ALGOL 60: Compiler Construction in Czechoslovakia in Early 1960s
Helena Durnova

Eastern European Computer Pioneers’ Roundtable

S59  Instruments for Modifying and Enhancing Oneself and their Social Impact: The Case of Amphetamines and Some of their Derivatives
Organisers: Pascal Nouvel, Maria-Teresa Brancaccio
Room: A3

Tuesday, 28 July, 17.30 – 19.30
Chair: Maria-Teresa Brancaccio

Les Thérapies Médicamenteuses de la Bile Noire par Râzî (865 – 925)
Mehrnaz Katouzian-Safadi

When ‘Modifying the Self’ is a Command: Amphetamines and the Allied Military in the Second World War
Nicolas Rasmussen

Pascal Nouvel

A Conceptual History of the Notion of Bio-power
Dominique Lecourt

Make Me Smarter’: Amphetamines and the Quest for Cognitive Enhancement
Maria Teresa Brancaccio

S60  Colonizing Drugs – Constructing the Other in the Mirror of (Precarious) Substances
Organiser: Bettina Wahrig
Room: A7

Saturday, 1 August, 15.00 – 17.00
Chair: Bettina Wahrig

Will the Real Colonizer Please Stand Up? Early Modern Controversies on the Effects of Tobacco on the Western Body.
Martina Mittag

Religion – Pharmacy – Transfer of Pharmaceutical Knowledge and Drugs Men of God as Mediators Between the Cultures (16th to 18th c.)
Sabine Anagnostou

Drugs from the Mountains: Coca as an Exotic Tonic (ca. 1850-1900)
Bettina Wahrig
Saturday, 1 August, 17.30 – 19.30  
Chair: Bettina Wahrig

   The Toxic Total Situation: Preservatives and the Critical Consumer Around 1960 in West Germany  
   Heiko Stoff

   Standardizing Sleeping-Sickness Therapy as a Precarious German-British-Belgium-Spanish Cooperation in the Interwar Period  
   Marion Hulverscheidt

   Test Systems and Mutagens: The Regulation of Scientific, Consumptive, and Dangerous Objects  
   Alexander Schwerin

S63 Entanglements of Instruments and Media in Investigating Organic Worlds  
Organisers: Joan Steigerwald, Philippe Huneman
Room: A13

Saturday, 1 August, 11.30 – 13.30  
Chair: Joan Steigerwald

   Defining Life in the Eighteenth Century: Instrumental Reasoning, Excitable Matter and Living Subjects  
   Joan Steigerwald

   The Very Nervous Apparatus: Entanglements of Media, Mind and Matter  
   Cornelius Borck

   Response-able Experimentation with Toxic Algae  
   Astrid Schrader

   Generating “Anxiety Like Phenotypes” in the Elevated Plus Maze: A Measure of Mouse Anxiety or a Model of Human Anxiety?  
   Nicole C. Nelson

Saturday, 1 August, 15.00 – 17.00  
Chair: Joan Steigerwald

   The Use of Computer Simulation in Studying Biological Evolution: Pure Possible Processes, Selective Regimes and Open-ended Evolution.  
   Philippe Huneman

   Recalcitrant Instruments, Objects and Investigators in the Non-invention of a Non-invasive Prenatal Genetic Diagnosis Technique  
   Aryn Martin

   Excitable Media: Intra-cellular Signal Transduction and Intra-active Models of Cellular Life  
   Natasha S. Myers
S64 Working with Pages and Texts
Organisers: Karine Chemla, Ito Kenji, Richard Yeo
Room: A3

Session I.: Working with Texts and Inscriptions
Friday, 31 July, 17.30 – 19.30
Chair: Ito Kenji

Working with Texts and Spaces to Extract Square Roots in Medieval Sanskrit Mathematics
Agathe Tamar Keller

From Quarry to Paper: Cuvier's Reconstruction of Montmartre Tertiary Mammals
Bruno Belhoste

Laboratory Writing
Hans-Jörg Rheinberger

Session II.: Writing and Rewriting Writings

The Significance of Paratext in Buffon's Histoire Naturelle
Stephane Schmitt

Saturday, 1 August, 09.00 – 11.00
Chair: Karine Chemla

A Mathematician Writes within a Given Genre: Books of Mathematical Recreations by Dénes König
Mitsuko Mizuno

Session III.: The Analysis of Textual Practices and Historiography

Focusing on Actual Manuscripts to Discuss What the Genuine Text of Euclid Was
Ken Saito

Editing Texts and Diagrams: Medieval Islamic Discussions of Archimedean Solids
Gregg De Young

La Reflexion du Passé Industriel des Pays de Bohéme aux Archives du Musée National Technique de Prague
Milada Sekyrková

S65 Diverse Cultural Practices in 20th Century Nuclear Physics
Organisers: Gisela Mateos, Maria Rentetzi
Room: A9

Friday, 31 July, 15.00 – 17.00
Chair: Christian Forstner

The Greek-American Connection: The First Nuclear Reactor in Greece
Maria Rentetzi

The Mexican-American Connection: The First Mexican Accelerator
Gisela T. Mateos

The Norwegian-American Connection: Atom Smashers Before and After WW II.
Roland Wittje
Friday, 31 July, 17.30 – 19.30
Chair: Gisela Mateos

Turkey’s Participation to the ‘Atoms for Peace’ Program: Expectations and Consequences
Kaan Ata

Nabor Carrillo and the First Van De Graaff Particle Accelerator in Mexico
Enrique Esqueda Blas, Ramos Lara María de la Paz

S66 Framing the Outer World in the Biological and Human Sciences: A Comparative Historical Perspective
Organisers: Vincent Guillin, Beth Hannon
Room: A4

Friday, 31 July, 11.30 – 13.30
Chair: Vincent Guillin

Circumstances in Context: The Example of John Stuart Mill's Ethology
Vincent Guillin

Weismann’s Barrier?: the Roles of Soma and Environment in Late Nineteenth Century Evolution
Fern M. Elsdon-Baker

Milieu, Umwelt and Lebensraum. Friedrich Ratzel and the Beginnings of an Environmental Science
Wolf Feuerhahn

The Internal and the External in Evolutionary Theory at the Turn of the Twentieth Century
Sander Gliboff

Friday, 31 July, 15.00 – 17.00
Chair: Vincent Guillin

“To Do Work in the World”: Instrumentalism in Pragmatist Psychology and Philosophy
Stephane Madelrieux

The Concept of Umwelt in Physiological Anthropology: Von Uexküll, Portmann, Buytendijk
Anne M. Fagot-Largeault

The Concept of Biodiversity: Between Science and Society
Marc Kirsch

Finding the Boundary: Evolutionary Developmental Biology
Elizabeth M. Hannon
S67 Uses of Cultural Manifolds in Research  
Organisers: Nathan Sivin, Xiaochun Sun  
Room: A7

Saturday, 1 August, 09.00 – 11.00  
Chair: Xiaochun Sun

Cultural Manifolds and the Need for Generalists  
Nathan Sivin

The Manipulation of Fire in Chinese Alchemy  
Juan He

Animals as Cultural Manifold  
Martina Siebert

Saturday, 1 August, 11.30 – 13.30  
Chair: Nathan Sivin

What Inhibited the Development of the Planetary Theory in Song China?  
Xiaochun Sun, Guangchao Wang

Control vs. Autonomy: Fabrications in Song Astronomy  
Yu Yu Dong

The Needham Question and Beyond  
Liuxiang Hao, Xiaoye Cao

S69 The Social History of Military Technology  
Organisers: Barton C. Hacker, Margaret Vining  
Room: B3

Tuesday, 28 July, 11.30 – 13.30  
Chair: Barton C. Hacker

Separating the Men from the Polloi: The Rejection of Missile Technology by the Classical Greeks  
Nick D. Barley

Republican Roman Rejection of Siege Technology  
Colin D. Hough

Seven Reasons for the Rejection of Known Military Technologies in the Classical World  
Tracey Rihll

Children of Mercury, Children of Mars: Civil and Military Technology in German Vernacular Illustrations, 1400-1525  
Bert Hall

Tuesday, 28 July, 15.00 – 17.00  
Chair: Barton C. Hacker

Native American Adoption of Firearms 1609 – 1640  
Lawrence E. Babits
The Embodied Soldier and the Impact of Technology  
*Michael Budd*

Spirit of the Age: Inventors, Scientific Instruments, and the Military at the Royal Artillery Institution, Woolwich  
*Steven A. Walton*

The Conventionnel, the Workers and the War. An Early Welfare State or a Workforce Militarization?  
*Christophe Bonnet*

**Tuesday, 28 July, 17.30 – 19.30**  
Chair: Barton C. Hacker

Weapons and Ethnology in 19th-Century Britain: Lt.-Gen. Pitt-Rivers and his Museum  
*David F. Channell*

James H. Burton, John W. Mallet, and the Foundations of a New South: System, Uniformity, and Control at the Confederate Ordnance Department  
*Steven G. Collins*

Navy, Taxes, and People: The Italian Royal Navy's 1874 Shipbuilding Program and its Consequences  
*Ciro Paoletti*

“Hunk O’Tin” – The American Ambulancier and his Model T in France, 1915-1919  
*Jeffrey Larrabee*

**Wednesday, 29 July, 09.00 – 11.00**  
Chair: Margaret Vining

Visualizing Tanks: War Artists Confront a New Technology on the Western Front  
*Barton C. Hacker*

Impact: Packaging the U.S. Army Air Force Fire-Raising Practice During the Second World War  
*Ralph R. Hamerla*

The Norden-Victor Connection: Making Bombsights and Selling Adding Machines in World War II  
*Michael T. Tremblay*

**Wednesday, 29 July, 11.30 – 13.30**  
Chair: Margaret Vining

*Pierre-E. Mounier-Kuhn*

Greek Military Aviation in the Electronic Era: Technical Protocols, Competition, and International Trends  
*Dimitrios E. Ziakkas*

Touching the Face of God: Religion and the U.S. Air Force  
*Tim Cathcart*
S70 ‘Spacing Earth History’: Geological and Paleontological Sciences in Cultural Contexts from 17th to 20th Centuries
Organisers: Bernhard Fritscher, Miklos Kazmer

Room: A16

Wednesday, 29 July, 09.00 – 11.00
Chair: Bernhard Fritscher

Une “Approche Organique” des Montagnes en Europe Médiévale – Sauvegardée par des Mineurs Allemands en Hongrie et Documenté par Marsigli
Péter Papp

Origin of Geology in the Netherlands (1780-1839)
Thomas J.A. Reijers

First Geological Investigations of Australia’s Coastal Regions by French and British Expeditions, 1788-1803: An Example of Scientific Cooperation Between Two Nations at War
Wolf Mayer

Wednesday, 29 July, 11.30 – 13.30
Chair: Bernhard Fritscher

Letters of German Naturalists to Domokos Teleki, the First President of the Jena Mineralogical Society, in the End of the 18th Century
István Viczián

Mining Versus Archaeology: National Styles in Early 19th Century Stratigraphy
Bernhard Fritscher

Lyell’s Palaeontological Research in Gran Canaria
Consuelo Sendino, Paul D. Taylor

Wednesday, 29 July, 15.00 – 17.00
Chair: Miklós Kázmér

Genealogical Reasoning in Alpine Tectonics. Linking Family History to Earth History
Andrea B. Westermann

Styles in Geology: Eduard Suess and Erudition
Ernst P. Hamm

The Ries Patriots: The Influence of Nationalism and Local Confinement on a Science Distrusting Instruments
Martina M. Kölbl-Ebert

Wednesday, 29 July, 17.30 – 19.30
Chair: Miklós Kázmér

Geology as a Service in Nation Building – The Japanese Example
Andreas N. Küppers, Yasuo Nogami

The Soviet Experts and the Integrated Survey of Natural Resources in China (1950s)
Xiaoqing Hu
S71 Instrumentalizing Social Practice – Socializing Instrumental Practice
Organisers: Peter Heering, Klaus Staubermann
Room: A9
Tuesday, 28 July, 11.30 – 13.30
Chair: Peter L. Jakab

- Political Ideas and Instrumental Ideals: The Design of Scientific Instruments in the Late 18th Century
  Peter Heering
- Calorimetry and the Social Question in the Late Nineteenth Century
  Elizabeth R. Neswald
- Instrumental Knowledge: Understanding Historic Socio-Technological Practice through Engineering Models
  Klaus Staubermann
- Accelerating for Peace Science, Technology, and the American Decade of Nuclear Research in India
  Jahnavi Phalkey

Tuesday, 28 July, 15.00 – 17.00
Chair: Klaus Staubermann

- Sounds for Comfort - of Computers Users in the 1950s
  Gerard Alberts
- Orbiting Mars, Orbiting a Camera: The Ambiguities of Building a Scientific Research Group Around a Single Instrument
  Jan Frercks
- Gathering Data, Losing Focus: The Aeronautical Research Instrumentation of Samuel Pierpont Langley
  Peter L. Jakab
- “A Fatal Hour for Metallography”: The Cognitive and Social Appropriation of New Instruments and Methods in Aachen’s Ferrous Metallurgy from 1900 to 1914
  Stefan Krebs

S72 60 Years of Cybernetics and Information Theory – Ideas, Artefacts and Instruments
Organiser: Lars Bluma
Room: A9
Wednesday, 29 July, 09.00 – 11.00
Chair: Peter Heering

- What Cybernetics Did to Change the Mindsets of Engineers: New Design Procedures in the 50s and 60s
  Lars Bluma
- Crossing Boundaries of Cybernetics and Information/Communication Theory. The Idea of Fuzzy Sets and its First Technical Application
  Rudolf Seising
Bionic Prototypes as Scientific Models: Experimental Epistemology at the Biological Computer Laboratory 1958-1974
Jan K. Müggenburg

Richard Wagner and his Book on Feedback Systems in Economy
Frank Dittmann

S73 Ideas of Technology Across Time and Space: Changing Concepts and Ideologies
Organiser: Eric Schatzberg
Room: A9

Wednesday, 29 July, 15.00 – 17.00
Chair: Lars Bluma

The Arts and Engineering: Their Meaning and Cultural Place in Late Medieval and Early Modern Europe
Pamela O. Long

A Weberian Model on Technological Knowledge – Medieval Transmission of Knowledge on Pigments and Dyes for Painters and Illuminators
Guido Frison

“Machine” and “Decline”: Conceptions of Technik in the Conservative Revolution of the Weimar Republic
Adelheid Voskuhl

Wednesday, 29 July, 17.30 – 19.30
Chair: Stefan Krebs

The Transnational Shaping of Theory of Technology in Imperial Japan, 1931-1945
Aaron S. Moore

The Role of Continental Concepts of Technology in American Social Thought, From Talcott Parsons through Herbert Marcuse
Eric Schatzberg

S74 Technology in the Interaction with Society and the Environment
Organiser: Timo Myllyntaus
Room: A9

Tuesday, 28 July, 17.30 – 19.30
Chair: Irina Gouzévitch

Technological Responses to Concern for the Future: Finnish Experience on Copying with Limits of Natural Resources
Timo J. Myllyntaus

Driving is (Not) for Everyone – Gender Perspective on Motoring Experiences in Finland, 1949-1980
Riikka Jalonen

69
Against the Tide – Technology Transfer from the Periphery
Jan Kunnas

Resource Conservation and Electrification in California
James C. Williams

S75 Playing with Technology
Organiser: Stefan Poser
Room: A9
Thursday, 30 July, 15.00 – 17.00
Chair: Reinhold Bauer

Heavenly Games of Flight on the Prehistory of Flying: Between Aesthetic Illusion and Wonderful Technology
Natascha Adamowsky

Toys, Educational Toys, and Scientific Instruments
Joseph Wachelder

Stories of Modern Technology in the Child’s World During the Cold War: The Case of the Netherlands
Dick Van Lente

Technology, Play and Innovation
Stefan Poser

S76 Politics, Technology and Infrastructure
Organiser: ICOHTEC
Room: A9
Thursday, 30 July, 17.30 – 19.30
Chair: Janis Langins

Bertrand Goldschmidt, Plutonium and Technobiography
Matthew Adamson

The Building of the Paris Métro, from 1898 to Second World War: An Overview on the History of Technology
Pascal B. Desabres

Sean Kalic

A Glimpse Behind the Curtain: Polish Perspectives on the American Housing Industry in the 1950s
Slawomir Lotysz

Tires for Giants. The Development of the Pneumatic Tire and its Importance for Road Transportation
Jørgen Burchardt
S77 The Impact of Ideas and Ideologies on Science and Technical Innovations  
Organiser: ICOHTEC  
Room: A9  
Friday, 31 July, 11.30 – 13.30  
Chair: Dick van Lente  
Engineers and Conservatives in the Creation of State Hydroelectric Power in Canada  
Janis Langins  
The Technology Gap in Canadian Medicare  
John B. Stranges  
Institutional Cultural Influence on the Application of Science to War, 1914 to 1945  
David Zimmerman  
Evidences Regarding the Introduction of Metallurgy and the Utilization of Gun Powder in Europe  
Horia Colan

S79 Special Topics  
Organiser: ICOHTEC  
Room: A15  
Friday, 31 July, 17.30 – 19.30  
Chair: Alexandre Herlea  
The Historical Development of the Notions “Natural” and “Artificial”  
Vitaly Gorokhov  
Water Pollution and its Treatment in Nineteenth-century United States  
Anthony N. Stranges  
Mining: Ideas and Instruments in Germany 1750 to 1900  
Wolfhard Weber  
Holger Skorupa

S80 Practices, Views, and Networks in 19th and 20th Century Mathematics  
Organisers: Laura Rodríguez, Frédéric Brechenmacher  
Room: A16  
Friday, 31 July, 11.30 – 13.30  
Chair: Frederic Brechenmacher  
What is 'Mathematical Practice' in The Philosophy of Mathematical Practice?  
Jessica Carter  
Hilbert on the Notion of Completeness: A Conceptual and Historical Analysis  
Catherine Karella
Emile Picard: A View on his Mathematical and Epistemological Ideas
Pierre Lamande

History of Mathematics as a Way of Justification. Mathematicians’ Views on their own Discipline During the Weimar Republic
Bjoern T. Schirmeier

Friday, 31 July, 15.00 – 17.00
Chair: Laura Rodriguez

Views and Practices in the Early Functional Analysis
Laura Rodríguez

A Triple Point of Mathematics: Born and Wiener’s “New Formulation of the Laws of Quantization”
Arianna Borrelli

Networks and Individual Agency: The Case of Galois Theory in France at the Turn of the 19th Century
Caroline Ehrhardt

Friday, 31 July, 17.30 – 19.30
Chair: Laura Rodriguez

On the Identities of Algebra in 19th Century: Algebraic Practices, Networks, Cultural Issues
Frédéric Brechenmacher

Practices, Networks, and Fields: Making (Historical) Sense of Poincaré’s Early Work
Renaud Chorlay

Shifting Boundaries. Kronecker’s Early Work on Complex Multiplication and Dirichlet’s Legacy in Number Theory
Ivahn Smadja

S82 Visual Cognition in the History of Science
Organisers: Christophe Heintz, Tamas Tofalvy
Room: C1

Friday, 31 July, 17.30 – 19.30
Chair: Tamás Tófalvy

Visual Cognition and History of Science
Christophe Heintz

Visual Thinking in Medieval Scientific and Philosophical Manuscripts
Anna Somfai

What are Genetic Maps Visualizations of?
Marion Vorms

The Role of Visuality in Konrad Lorenz’s Philosophy of Science
László Nemes
Organisers: Kapil Raj, Mau Chuan-hui
Room: A7

Friday, 31 July, 11.30 – 13.30
Chair: Kapil Raj

Needham's Rivers and Sea Metaphor and the Nineteenth Century Perception of Scientific Knowledge in India
Irfan Habib

Circulation Intercontinentale des Savoirs et des Techniques au Pérou (XVI-XVIIIe Siècle)
Carmen Salazar-Soler

Maps, Perambulators, Repeating Circles, and Theodolites: Mapping in India and Great Britain, 1780-1830
Kapil Raj

The Jesuit and the Long Life. The First French Translation of a Chinese Text of Nurturing Life (Yangsheng) in the Early 18th Century
Frédéric Obringer

Friday, 31 July, 15.00 – 17.00
Chair: Mau Chuan-hui

From Starry Abnormality to Meteorological Phenomenon: The Impact of Aristotelian View of Comet on Xu Guangqi and Xiong Mingyu in Ming Wanli Period
Kuang-Tai Hsu

Gewu Rumen: A Case Study of the Introduction of Western Physics into Nineteen-Century China
Hao Chang

Artisanal Know-how and Modern Sciences: The Use of Chinese Traditional Knowledge in French Research on Sericulture
Chuan-Hui Mau

S87 The Reception of Darwinism at the Subnational Level: Cities
Organisers: Thomas F. Glick, Hans Henrik Hjermitslev
Room: A5

Tuesday, 28 July, 11.30 – 13.30
Chair: Thomas Glick

The Early Reception of the Origin of Species in Boston
Thomas F. Glick

Harmony of Nature and Struggle for Survival: Reception of Darwinism in Russian Plant Geography
Anastasia A. Fedotova

Darwinism and Neo-Darwinism between Prague and Brno, 1900-1915
Michal Simunek, Tomas Hermann
Tuesday, 28 July, 15.00 – 17.00  
**Chair: Hans Henrik Hjermitslev**

Darwinism and the Birth of the Polish Urban Intelligentsia: Warsaw, Cracow, and Lwów  
*Daniel Schümann*

Darwinism and Cultural Struggles in Rural Askov and Metropolitan Copenhagen in Nineteenth-century Denmark  
*Hans H. Hjermitslev*

**S88 Comparative Reception of the Synthetic Theory of Evolution in the Soviet Union, Eastern and Central Europe**  
Organisers: Eduard I. Kolchinsky, Uwe Hossfeld, Oleg Philipchuk  
Room: A5

Tuesday, 28 July, 17.30 – 19.30  
**Chair: Eduard I. Kolchinsky, Oleg Philipchuk**

Peculiarities of Evolutionary Synthesis in Nazi Germany and Soviet Russia  
*Eduard Kolshinsky*

The Development of Darwinism by Ukrainian Zoologists (Late 19th – Early 20th Centuries)  
*Oleg Pilipchuk*

Theodosius Dobzhansky: A Large Step Towards Solving “The Species Problem” – A Main Step Towards “Evolutionary Synthesis”  
*Mikhail Konashev*

The Teaching of Evolutionary Theory in Russian Secondary Schools Between the World Wars  
*Anna V. Samokish*

The Selectionist Turn of Bernhard Rensch (1900-1990) through the Prism of Panpsychistic Identism  
*Uwe Hossfeld, Georgy S. Levit*

Reception of Darwin’s Ideas in Russia: The Struggle for Existence and Natural Selection. V. N. Sukachev’s Experimental Program  
*Yakov Gall*

**S89 The Role of Rail Transport in Development of the Infrastructure in St-Petersburg (Russia) and Kiev (Ukraine) and their Interference in XIX – First Half of XX Centuries**  
Organisers: Margarita Voronina, Alexander Soldatov, Victor Shataev  
Room: A10

Saturday, 1 August, 09.00 – 11.00  
**Chair: Margarita Voronina**

Role of the Corpus of Railroad Engineers in Institutionalization of High Technical Education in Russia  
*Boris I. Ivanov*
The Role of Institute of Engineers of Means of Communication (St. Petersburg, Leningrad) in Formation Engineers of Transport in 1910-1930
Margarita M. Voronina

Borodin Creativity in a Context of Development of Mobile Structure Engineering of Ukrainian Railroads (Second Half XIX in)
Viktor N. Shataev

The Warsaw Railway Station in St. Petersburg
Aleksander V. Soldatov, Nina P. Soldatova

Saturday, 1 August, 11.30 – 13.30
Chair: Alexander Soldatov

K.I. Potier (1786 - 1855) and Applied Geometry Development in Russia.
Natalya N. Eliseeva, Nikolai A. Eliseev

Department of Physics and its Professors in the Institute of Engineers of Means of Communication
Petr V. Velikorussov

The Historical Development in Kiev University of Railways Transport
Anna P. Berezhnyak

The Investigation of the Development of Non-traditional Types of Transport
Elena N. Eliseeova

Saturday, 1 August, 15.00 – 17.00
Chair: Victor Shataev

The Role of the Naval Engineering Institute in Creation of Russian Underwater Navy
Isay Kuzinets

Origin and Beginning of Building of Diesel Engines in the World (End of XIX-Beginning of XX Century)
Elena L. Sorochniskaya

S91 Biography as a Genre in Different National Traditions of Writing about Science and Scientists
Organisers: Galina Smagina, Aleksandar Petrovic, Marina Loskutova
Room: A13

Friday, 31 July, 11.30 – 13.30
Chair: Aleksandar Petrovic

Reading History of Women Scientists Through Biography : Life-stories of Lydia Rabinowitsch-Kempner, Lina Stern, and Gertrud Woker
Natalia Tikhonov Sigrist

Assessment of Different Biographical Approaches to Writing about Science and Scientists
Rose-Luise Winkler

Local Amateur Scholars of the 19th – early 20th Centuries in Russia: Biographical Tradition and Prosopographic Data
Marina V. Loskutova
Biographic Method as an Instrument of Historical-Scientific Research (the Example of W. F. Louguinine’s Studies in Thermochemistry)

Elena A. Zaitseva, Galina I. Liubina

Friday, 31 July, 15.00 – 17.00

Chairs: Galina Smagina, Marina Loskutova

The Year that has Changed the Earth

Aleksandar Petrovic

Victor Conrad and the Seismological Service of Austria

Christa Hammerl

The Diaries of the Traveler Pyotr Kozlov: A Self-portrait in Geographic Space

Tatiana I. Yusupova

The First and the Only One: The Director of St. Petersburg Academy of Sciences Princess Ekaterina Dashkova and her Biographers

Galina I. Smagina

L’histoire de Science et l’Histoire de la Vie: Une Nouvelle Lecture de la Biographie du Savant

Natalia Knekht

S93 History of Prospective Technology Studies

Organisers: Imre Hronszky, Gerhard Banse, Armin Grunwald

Room: C3

Thursday, 30 July, 15.00 – 17.00

Chair: Gerhard Banse

Cooperation with Middle and Eastern European Countries in the Field of TA – Results and Experiences

Gerhard Banse

History and Perspectives of PTA – The Case of the EP

Miklós Györffy

The Development of Parliamentary Technology Assessment (PTA) in The Netherlands

Jan Staman

Parliamentary Technology Assessment in Europe – A Short history

Michael Rader

Thursday, 30 July, 17.30 – 19.30

Chair: José A. López Cerezo

Expectations and Expertise Meet. Nutritional Theories and Functional Foods

Marta I. Gonzalez, Rebeca Ibanez-Martín

Technology, Literacy, and Knowledge Society

Cipriano Barrio-Alonso, Irene Díaz García

Participation in Science and Technology: Learnings from the Swiss PubliForums and Publifocus

Sergio Bellucci
Friday, 31 July, 11.30 – 13.30
Chair: Klaus Kornwachs

The Methods of Herman Kahn in The Year 2000 Forecast Revisited
Klaus Kornwachs

Prospective Studies of Technology in Mexico and Latin America: Past and Future of Network Building
F. Medardo Tapia Uribe

On History of Roadmapping and Scenario Building
Imre Hronszky, Ágnes Fésüs

The Research and Public Diffusion of Science and Technology in the Museums
Garcia Myriam, Belén Laspra

Friday, 31 July, 15.00 – 17.00
Chair: Attila Havas

National Foresight Programmes in Central and Eastern Europe
Attila Havas, Michael Keenan

S&T Forecasting in the Soviet Union and the Post-Soviet Countries
Igor Yegorov

Florida Tech – Building a Research University (A Case Study)
Gordon L. Nelson

A Critical Approach to Public Understanding and Participation in Science and Technology
José A. López Cerezo, José L. Luján López, Montaña Cámara Hurtado

S94 Brief History of Characterisation of Engineering Materials and Structures
Organiser: László Tóth
Room: C5

Wednesday, 29 July, 11.30 – 13.30
Chair: László Tóth

The Role of the Natural and Engineering Sciences in the Economical and Social Reorganisation
László Tóth

Historical Background and Development of Impact Testing
Andre Pineau

Metal Fatigue – The Story of an Enigmatic Science
R. Sunder

Brief History of Structural Integrity Concept
János Lukács

Evolution of the Hardness Testing
Péter Tóth

Evolution of the Non-destructive Testing in Hungary
Peter Trampus
S95  History of Travel, Travel Medicine, and Traveler’s Medical Kits
Organiser: Peter Felkai
Room: A14

Saturday, 1 August, 17.30 – 19.30
Chair: Péter Felkai

History of Travel Medicine and the Travelers
Péter Felkai

From the First “Fountain Pen” to Ball Point Pens. Writing Instruments from and for Medical Doctors.
Gerhard F. Strasser

Journeys of Medical Purpose in Ancient Near East (2nd Millennium B.C.)
Gaye Sahinbas Erginoz

S96  Seeing and Measuring, Constructing and Judging: Instruments in the History of the Earthsciences
Organisers: Ana Carneiro and Marianne Klemun
Room: A16

Tuesday, 28 July, 11.30 – 13.30
Chair: Ana Carneiro

Perception of Strong Winds in Early Modern Times
Katrin Hauer

Searching for Modernization – Instruments in the Development of Geological Sciences in Portugal (18th Century)
Isabel M.C. de O. Malaquias, Manuel S. Pinto

The ‘Mineralogical’ Task of Human Senses – A Survey on the Language of ‘Mineralogy’ in Weimar-Jena circa 1800
Benigna Kasztner

Travelling with Instruments: Italian Geologists in the Field Between the 18th and 19th Centuries
Ezio Vaccari

Tuesday, 28 July, 15.00 – 17.00
Chair: Marianne Klemun

Minerals Scrutinized: Alberto Betim Paes Leme (1883-1938) and the Application of Spectrography
Silvia F.M. Figueiroa

Aspects of the Role of Microscopes in the History of Petrology in Japan
Michiko Yajima

The Early History of Geological Maps and Their Use as Instruments of Discovery, With East–West Comparisons
David Roger Oldroyd

The Geologist’s Hammer – Tool, Equipment, Instrument and/or Bagde
Marianne Klemun
Tuesday, 28 July, 17.30 – 19.30

Chair: Ana Carneiro

Measuring the Inaccessible Earth: Deep Time and Unreachable Spaces
Gregory Good

"A Bursting Landscape in the Middle of Portugal: Theories and Experiments by Georges Zbyszewski (1909—1999)"
Teresa S. Mota

Time Machines: Model Experiments in Geology
Thomas Brandstetter

Under the Spell of the Photographic Camera: A Case-study of the Use of Photography in Nineteenth-century Palaeontology
Ana M. Carneiro
Detailed Program of Regular Sessions

T02 Classical and Oriental Antiquity
   Room: C1
Tuesday, 28 July, 11.30 – 13.30
Chair: Hermann Hunger
   A Prehistoric Gnomon
      J. Samuel Cornelius, George Abraham
   Accounts of Living and Dying in Aristotle’s De Long. and De Juv.
      Keith Bemer
   The Interaction of Mathematical and Physical Astronomy in Antiquity: The Earth-Sun Distance in Ptolemy’s Astronomy and Cosmology
      Christian C. Carman
   Planetary Models as Expounded by Nilakantha in Aryabhatiya-bhashya
      Kasi Viswanatha Sarma Upadyayula

Tuesday, 28 July, 15.00 – 17.00
Chair: Keith Bemer
   Computation of Lunar Eclipse in Indian Astronomy
      Dinesh Mohan Joshi
   Early Greek Mathematics and Thales Geometry: A Plausible Reinstatement
      Dimitrios Patsopoulos
   Susruta: The Sage-surgeon of Ancient India & His Surgical Instruments
      Amarnath Thakur
   Greek Paradoxography: The Beginning of Popular Science in the Hellenistic World, between Entertainment and Social Prestige
      Irene Pajón Leyra

Tuesday, 28 July, 17.30 – 19.30
Chair: Irene Pajón Leyra
   The Three- and Four-line Locus in Apollonius’s CONICA: Geometry and Algebra
      Sabetai Unguru, Michael N. Fried
   Analysis and Discovery: The Babylonian Mathematics in the Light of the Euclidean Data
      Piedad Yuste
   Indian Astronomy and Inscriptions
      Subbarayappa V. Bidare

T03 Arabic and Islamic World
   Room: C1
Wednesday, 29 July, 09.00 – 11.00
Chair: Mohammad Bagheri
   View on the Classification of Animals by Al-Jähiz (776-868)
      Meyssa Ben Saud
The Correlation between Local Culture & Public Spaces along the History of Islamic Cities (Case Study, Loft Port, Qeshm Island)  
Mehri Mohebbi, Amir Saeed Mahmoodi

Trees of Knowledge: Generic Templates for Al-Farabi’s "Enumeration"  
Lydia S.M. Wilson

The Experimental and Instrumental Contexts of Early Arabic Optics  
Elaheh Kheirandish

Wednesday, 29 July, 11.30 – 13.30  
Chair: Mohammad Bagheri

Combinatorial Problems on Chessboard from 11th Century Iran  
Mohammad Bagheri

Ghâzân Khân’s Innovations of the Astronomical Instruments  
Seyyed Mohammad Mazaffari, Georg H. Zotti

A Comparison between the Optical Doctrines of Ibn al-Haytham (Alhazen) and Ibn Sīna (Avicenna) by Kamāl al-Dīn al-Fārisī  
Maryam Farahmand

Traces of Mathematical Historiography in Islamic Mathematical Works  
Younes Karamati

Thursday, 30 July, 15.00 – 17.00  
Chair: Mohammad Bagheri

Texts, Instruments and Learning in the 14th Century Maghrib. The Sine Quadrant as a Didactical Resource.  
Maravillas Aguiar Aguilar

Prediction via Numbers and Letters  
Hosein Roohoullahi

A Comparative Study of Qutb al-dīn Shīrāzī’s Models on the Configuration of the Outer Planets  
Kaveh F. Niazi

Planetary Model of Qutb al-Din Shirazi for Superior Planets  
Amir Mohammad Gamini

Thursday, 30 July, 17.30 – 19.30  
Chair: Mohammad Bagheri

The Integration of Philosophy, Logic, and Exact Observation in Laboudy’s Medical Investigations  
Tarek Adnan Ahmed

Linear Astrolabe according to Its Inventor  
Sajjad Nikfahm Khybravan

A History of Precise Calculations in Exact Sciences: Ancient and Medieval Times  
Fateme Savadi
Friday, 31 July, 11.30 – 13.30
Chair: Mohammad Bagheri

Mukanna "Moon Maker": Discoverer of Mercury Telescope?
Abasali A. Rustamov

Stairway to Heaven or Sullam-al-Sama of Kashi
Farhad Rahimi

T04 South Asia and India
Room: A11

Tuesday, 28 July, 11.30 – 13.30
Chair: Michael A. Cremo

The History and Prospects of Bangladesh to India Natural Gas Pipeline Project
Md. Mamunur Rashid

Perceptions of Western Techno-Scientific Progress: Karim Khan Mushtaq Jhajjari – a Visitor to Britain (1840-41)
Gulfishan Khan

Role of Technical Thoughts in Social Context
Ugrasen Pandey

On the History of Brahmagupta’s Mathematics and Its Transmission to Arab Countries
Rabindra Kumar Bhattacharyya

Tuesday, 28 July, 15.00 – 17.00
Chair: Katalin Munkácsy

Planning and Technology for National Reconstruction, the NPC Initiative in Colonial India
Jagdish N. Sinha

Time to Change and Unchanging Time – Modernity, Colonialism and the Native Calendar Reform in Late Nineteenth Century Tamil Nadu
Venkateswaran Thathamangalam Viswanathan

Rewriting the History of Indian Archeology
Michael A. Cremo

Concept of Sunya in the Indian Antiquity
Parthasarathi Mukhopadhyay

Ideas and Instruments: The Indian Contribution
K.S. Murty

Tuesday, 28 July, 17.30 – 19.30
Chair: Katalin Munkácsy

Jesuit Contribution in Science Education, Research and Popularisation in Bengal (India) During the Late 19th Century
Subhankar Ghosh
Saltpetre Manufacture Technology in Medieval India
Ishrat Alam

The Lessons of Millenary Water Use in the Ancient Israeli Kingdom (VIII BC– II BC)
Olga A. Aleksandrovskaya, V.A. Shamis

T05 East Asia
Room: C5
Friday, 31 July, 11.30 – 13.30
Chair: Erich Pauer

The Jiudian Bamboo Slips and the Space and Time Correlations of the Yin and Yang Concepts
Sándor P. Szabó

The Beginning of Wasan: Mathematical Practices with Disparities
Marion Cousin

Continuing Joseph Needham’s Traces of the “Great Extension Number”: The Origin of the “Great Extension Mathematics” (Indeterminate Analysis) in China
Honghai Deng

The Organization of Technical Knowledge Transfer on the Eve of Japan’s Industrial Revolution
Erich Pauer

Friday, 31 July, 15.00 – 17.00
Chair: Yuqun Liao

Change in Meaning or Style of the Knowledge: Diversification of Equipments in Acupuncture Research in Contemporary China
Yan-Hong Huang

Introduction of the Understanding and Practice Course of Managerial Psychology in China in the 20th Century
Kang Xu, Chao He

The Main Characters of the Traditional Chinese Medicine
Yuqun Liao

The Meaning of Solar Eclipse for the Ancient Chinese Based on the “Jing Jian Nei Zhi” Text from the Chu Bamboo Slips Collection of the Shanghai Museum
András Márk Szekeres

Friday, 31 July, 17.30 – 19.30
Chair: Hsiu-fen Chen

Engendering Emotions: Women’s Melancholy in 16th-17th Century Chinese Medicine
Hsiu-Fen Chen

Election of Members of the Second Research Council of Academia Sinica and Its Impact in 1940
Jinhai Guo

Development of Botany in Republican China (1912-1949) – A Bibliometrics Analysis
Ang Li
An Analysis on the Debate of the Concept of “Mass-Energy”
Yan-Feng Wang

Good Fortune or Environmental Harmony?
Michael J. Paton

Soviet Experts and Chinese Air Force Education (1949-1960)
Yang Aihua

The Study of Relation between Science and Public in China Westlake Expo 1929
Zhengwei Li, Yadong Shi

T07 The Middle Ages (Western and Byzantine) and Renaissance
Room: A8

Thursday, 30 July, 15.00 – 17.00
Chair: István Draskóczy

Faith or Knowledge? Normative Relations between Religion and Science in Two Byzantine Texts.
Gianna Katsiampoura

Explanations of the Plague in the Late Middle Ages
Otto S. Gecser

Literature and Astronomy in Sacrobosco's Tractatus de Sphaera and Computus Ecclesiasticus
Roberto de Andrade Martins

On the Semiotic Processes that Enabled Bombelli’s L’algebra
Roy Wagner

Thursday, 30 July, 17.30 – 19.30
Chair: Roy Wagner

Child Health during the Medieval Ages in Islamic World
Abdul Nasser Kaadan

Byzantine Astrolabes and the Construction of Greek Authority in 16th-Century Europe
Darin Hayton

Mathematics and Venetian Naval Architecture: An Analysis of the Geometrical Methods in Ship Design Used from the 14th to the 17th Century
Lilia Campana, Mauro Bondioli

The Cisterna Fulcronica: What Can We Learn from a 16th Century Occitan Treatise of Arithmetics?
Annie Michel-Pajus

Friday, 31 July, 11.30 – 13.30
Chair: Benedek Varga

José A. González Marrero, Maravillas Aguiar Aguilar
Magic and Technology in Early Italian Renaissance: Automata in Boiardo’s “Orlando Innamorato”  
Nadia Ambrosetti

From Abulcasis to Guy de Chauliac – The History of the Surgery in Europe in the Middle Ages  
Erzsébet Igari

The Sense of Hearing and the Reconsideration of the Practical Sciences in Roger Bacon  
Yael Raizman-Kedar

Friday, 31 July, 15.00 – 17.00  
Chair: Darin Hayton

Horoscopes as Biographies in the Renaissance  
Dóra Bobory

The Late Medieval Salt Mining and the Technical Questions of Salt Transport in Hungary  
István Draskóczy

T08-01 Mathematics and Mechanics in the Classical Period (1543-1800)  
Room: C5  
Saturday, 1 August, 09.00 – 11.00  
Chair: János Tanács

The Problem of Parallels in its Social Context: The Political, Religious and Educational Circumstances of the Hungarian Kingdom at the End of the 18th Century  
János Tanács

The Problem of Conflict and Exchange of Knowledge: The Case of the Revolution in Ballistics in 18th Century Europe  
Toru Tajima

Do Not Lump Everything Together. The Failure of the Philosophical Model, the Success of the Mathematical one in Mechanics in the Classical Period.  
Fabio Zanin

John Theophilus Desaguliers: A Newtonian between the Patronage and the Market Relations  
Luiz Carlos Soares

Saturday, 1 August, 11.30 – 13.30  
Chair: János Tanács

The Early Years of Gresham College, London  
Robin Wilson

L’équilibre des Sons: La Musique et les Mécaniques chez Marin Mersenne  
Paulo T. Silva

The Concept of Speed by Descartes  
Gyula Kistüttősi
Euler’s Cartographical Works and Occurrence of Differential Geometry in XVIII Century
Inessa I.V. Ignatushina

Saturday, 1 August, 15.00 – 17.00
Chair: Petr E. Levkovsky

Pedro Giannini (fl. 1773-1800)
Juan M. Navarro-Loidi

Jacopo Riccati’s Research on Differential Equations
Silvia Mazzone

Johann Bernoulli’s Research on Mechanics
Satoshi Nozawa

Charles Bossut, an Outstanding French Mechanic and Mathematician of the XVIII Century
Petr E. Levkovsky, Vadim I. Yakovlev

Saturday, 1 August, 17.30 – 19.30
Chair: Katalin Munkácsy

Mathematical Education in Walachia, Moldavia and Transylvania in the 18th Century. European Mobility of Highly Cultivated People.
Eufrosina Otlacan, Romulus-Petru Otlacan

The Decimalization of Traditional Oral Numeration Systems across Languages and Culture: A Diachronic and Synchronic Overview
Dominique A. Vellard

T08-02 Physics and Astronomy in the Classical Period (1543-1800)
Room: A11

Wednesday, 29 July, 09.00 – 11.00
Chair: Péter Szegedi

The Astronomical Observations, Hypothesis, and Demonstrations in Chongzhen Lishu
Kehui Deng

Tycho Brahe and Kepler in Prague: Multifold Reflections on Astronomy
Manolis K. Kartsonakis

Notes on Johannes Kepler’s Book “Harmonice Mundi”
Marina V. Voinova

Astronomy and Optics: the Development of the Optics of Moving Bodies
Arnaud Mayrague

Wednesday, 29 July, 11.30 – 13.30
Chair: Lila Rakoczy

Georg Markgraf in Dutch Brazil: His Pioneering Astronomical Activities in the New World
Oscar T. Matsuura
Isaac Newton: The Exoteric and Esoteric Knowledge of the Principia
Tessa Morrison

Transformation of Proposition VII in Book I of Newton’s Principia with Special Reference to the Adjoining Figures
Takeshi Sugimoto

Stars, Births, and Kings: Astrophysics and Mythmaking in Seventeenth-century England
Lila Rakoczy, Martin Lunn

Wednesday, 29 July, 15.00 – 17.00
Chair: Tessa Morrison

Analogies of Sound and Light in the Scientific Writings of Athanasius Kircher
Oona Leganovic

The Status of the Milky Way in William Herschel’s Work and How did Science Historians of the Nineteenth Century Focus the Question.
Victoria Flório Pires de Andrade

T08-05 Biological and Medical Sciences in the Classical Period (1543-1800)
Room: A10

Thursday, 30 July, 15.00 – 17.00
Chair: Margaret E. Carlyle

How Aldrovandi Read, and Looked at, His Lycosthenes: Reading Practices, Images, and the Persistence of Knowledge in Sixteenth-century Natural History
Fabian Krämer

The Medical Library of the Secretary of the King of Sweden: Henrik Matsson Huggut (ca. 1540-1617): Authors from the Antiquity to the Renaissance
Terhi Kiiskinen

Midwives Modelling Mannequins: Obstetrical Machinery and Medical Knowledge in the French Enlightenment
Margaret E. Carlyle

Anatomy and Its Artefacts: Visualising the Body in the Eighteenth Century
Lucia Dacome

Thursday, 30 July, 17.30 – 19.30
Chair: Nuria Pérez-Pérez

Instrumental Use of Experimental Physics in Medicine at the Royal College of Surgery of Barcelona (1760-1843)
Nuria Pérez-Pérez

El Conocimiento Científico De La Naturaleza. El Saber Médico En Los Remedios Populares En El Yucatan Del Siglo XVII
Pedro Miranda Ojeda, Genny M. Negroe Sierra

Giovanni Borelli (1608-79) on Animal Movement
Jarmo Pulkkinen
T08-06 Technology and Engineering in the Classical Period (1543-1800)
Room: A6

Saturday, 1 August, 17.30 – 19.30
Chair: Robert Fox

Technology and Engineering in the Council House Tower of Medieval Brasov
Viorel Ene, Tibor Bedő, Marius Bența

Sandro Stura, Erminio Raiteri, Giulio Scarsi, Sandro Stura

Acoustique Physique et Procédés Techniques aux XVIIème et XVIIIème Siècles
François Baskevitch

Euler Meets Dutch Windmills: an Intersection between Mathematics and Experimental Philosophy in the 18th Century
Satoshi Nakazawa

Wolfgang von Kempelen – A Master of Engineering in the Age of Enlightenment
Alice Reininger

T09-01 Mathematics in the Contemporary Period (1800-)
Room: A10

Wednesday, 29 July, 09.00 – 11.00
Chair: Josipa G. Petrunic

Kolmogorov Program on Foundations of Mathematics
Alexander S. Kuzichev

Kazimierz Żorawski, his Work and the Creation of the Cracow Mathematical School
Zdzisław Pogoda

Quaternion Engagements and Terrains of Knowledge (1858-1880): A Comparative Social History of Peter Guthrie Tait and William Kingdon Clifford
Josipa G. Petrunic

One or More Definitions of Number in Gottlob Frege’s Papers?
Gabriela Besler

Wednesday, 29 July, 11.30 – 13.30
Chair: Péter Gábor Szabó

The Emergence of Fractional Calculus
Luisa F. Vargas Jimenez

From a Measure Theory to a Theory of Measures
Carmen Martinez Adame

The Riesz Brothers's Correspondence
Péter Gábor Szabó

The Baire Class and the Surgimiento of the Theory of Functions
Luis Recalde
Wednesday, 29 July, 15.00 – 17.00
Chair: Christian Gerini

La «Mémoire sur les Méthodes Générales d’Intégration» de Joaquim Gomes de Souza (1829-1864)
Marcos Vieira Teixeira

Les Commencements de la Science Statistique à l’Espagne et Portugal
Gabriela M. Fernández Barberis, M. Carmen Escribano Ródenas

Le Père de la Recherche Opérationnelle en Espagne: Sixto Ríos García
M. Carmen Escribano Ródenas, Ana I. Busto Caballero

Christian Gerini

Wednesday, 29 July, 17.30 – 19.30
Chair: Katalin Munkácsy

Is Science Discovering Nature or “Vice Versa”?  
Jasna Fempl Madjarevic

Vaclav Simerka-mathematician, Teacher, Priest
Karel Lepka

Des Ponts Entre L'est et L'ouest: Variations Austro-hongroises, Pétersbourgeoises et Königsbourgeoises
Norbert Verdier

T09-02 Physics and Astronomy in the Contemporary Period (1800-)
Room: A12

Wednesday, 29 July, 15.00 – 17.00
Chair: Péter Szegedi

Thomson versus Clausius: What is the Share of Each One in the Creation of the 2nd Law of Thermodynamics?
Mayane L. Nobrega, Suani T.R. Pinho

A History of Entropy through Various Methods
Eri Yagi, Rika T. Okamoto

La Réception Française de la Théorie Cinétique des Gaz
João P. Principe

The Relationship between Gibbs' Theory of Thermodynamics and that of Statistical Mechanics
Hajime Inaba

Wednesday, 29 July, 17.30 – 19.30
Chair: Ricardo L. Coelho

On Hertz’s Principles of Mechanics
Ricardo L. Coelho

Hertz’s Experiments on Electromagnetic Waves from Modern Retrospective: Serious Indications on Incomplete Approach
Roman Smirnov-Rueda, Alexandr Kholmetskii, Oleg Missevitch
Interaction of Experimental Programs: The Development of Experimental Research on Thermal Radiation in Germany at the End of the 19th Century
Daisuke Konagaya

Piazzi Smyth’s mapping of the solar spectrum in Lisbon, Sintra and Madeira: analysis of results and instruments
Fernanda M. Costa, Isabel M. Peres, Maria E. Jardim

Thursday, 30 July, 15.00 – 17.00
Chair: Matthew Stanley

Past as Prediction: Victorian Scientists on Ancient Eclipses and the Power of Science
Matthew Stanley

The Road to the West Goes South. International Exchange in Astronomy in the Early 20th Century
David M. Baneke

Danjon and French Astronomy during the Second Part of the 20th Century
Suzanne Débarbat

The Aether Drag Experiment in Three Different Contexts: Fizeau (1851), Michelson and Morley (1886), and Zeeman (1914)
Roberto A. Pimentel, Carlos B. G. Koehler, Carlos E. Fellows

Thursday, 30 July, 17.30 – 19.30
Chair: Helge Kragh

Fringe Cosmo-(a)-gonies: French and British “Cosmogonists” Facing Scientific Standardization
Volny Fages

The Revival of the Oscillating Universe
Helge Kragh

About a New Periodisation of the History of Neutrino and Weak Interactions from the Discovery of β-radioactivity up to the Solution of Solar Neutrino puzzle (SUDBURY, KamLAND)
Tibor Toro

Looking through the Microscope in the Context of Vienna Indeterminism – On a Local Way to Conceptualize Brownian Motion
Michael Stoeltzner

Friday, 31 July, 11.30 – 13.30
Chair: Arcangelo Rossi

Jun Ishiwara as a Forerunner of Bose on Statistics, de Broglie on Phase-Wave, and Einstein on Quantum Condition
Seiya Abiko

Compton’s Large Electron as an Example of His Classical Approach to X Ray Scattering
Indianara L. Silva, Ana Paula Bispo Silva

The Foundational Side of Italian Physics in the First Half of the XX Century
Arcangelo Rossi
Researches and Studies in Mathematical Non-classical Physics (Quantum; Relativist) Achieved in the Period cca. 1900 – cca. 1939/1940 by Scientists from Carpathean-Danubean-Pontean / Romanian / Space
Liviu Alexandru Sofonea, Elena Helerea, Sofia Hagia, Horia Salca

Friday, 31 July, 15.00 – 17.00
Chair: Juraj Šebesta

Contributions to Analyse of Life and Work of any Hungarian Origine Scientitits From Former Austro-Hungariyn Monarchy
Huba Laszlo Szoecc

N.N. Bogoliubov – The Great Scientist and Humanist of XX Century
Olga N. Golubjeva, László L. Jenkovszky, Aleksandr Dmitrievich Sukhanov

Principles of Physical Theories – Past and Present
Juraj Šebesta

Casimir Effect, the Spread of Research on it, and the Quantum Vacuum Ontology From 1948 to 1975
Thiago H. Maia, Reinaldo F. de Melo e Souza

T09-03 Earth Sciences in the Contemporary Period (1800-)
Room: A11
Saturday, 1 August, 09.00 – 11.00
Chair: H. Torrens

The Social Aspects of Natural-science World Outlook and the Evolution of the Ideas about the Age of the Earth
S.Kh. Maghidov

Two Centuries of Oil Industry of Chechen Republic
Ibragim Akhmedovich Kerimov

 Forgotten Colonial Seismology: The Introduction of Instrumental Seismology in the Philippine Islands (1865-1910)
Josep Batlló

Changes in State Directed Assessment and the Role of 'Conclusive Evidence': The NYS HS Earth Science Regents Exam Replaces 'Polar Wandering' with 'Plate Tectonics' as the Accepted Explanatory Theory for Observed Macro-Crustal Changes
Michael D. Sunderland

Saturday, 1 August, 11.30 – 13.30
Chair: H. Torrens

Geothermal Heat Flow as a Problem: The History of Observations and Theories
Alexander Nicolai Zemtsov

The Trails of Roman Symonowicz’ Mineralogical Travel (1803) to Transylvania (Ziemia Siedmiogrodzka)
Algimantas Grigelis

To the History of Water Supply in Moscow
Nadezhda Ozerova
The Search of Gold in America in XVI Century – The Combination of Knowledge and Experience of Nations
  Jury Mihajlovich Bazhenov

Saturday, 1 August, 15.00 – 17.00
  Chair: Károly Brezsnyánszky
  History of the Meteorological Observation in Buda(Pest) Since 1781
    Zoltan A. Dunkel
  The First Detailed Geological Map of the Polish Kingdom’s Coal Basin (1856)
    Andrzej J. Wojcik

T09-04 Chemistry in the Contemporary Period (1800-)
  Room: B2
  Friday, 31 July, 11.30 – 13.30
    Chair: Andres L. Lundgren
    The Relationship between Chemistry and Alchemy in the Age of the Enlightenment
      Halina Lichocka
    The Mineral Chemistry Laboratory of the Polytechnic School of Lisbon
      Maria Elisa Maia
    The Problematic Accommodation of the Rare Earth Elements in the Periodic Table from 1869 to 1913
      Pieter Thyssen
    Study of Water-ethanol Systems from Dmitriy Mendeleev to Nowadays
      Svetlana Patsaeva, Vera Z. Grigorieva

Friday, 31 July, 15.00 – 17.00
  Chair: Halina Lichocka
  To Do Research with Nose and Tongue: Some Reflections on the Role of Smell and Taste in the History of Chemistry
    L Anders Lundgren
  The 50th Anniversary of the Heyrovský’s Nobel Prize
    Jiří Jindra
  The Same Discipline in Different Places: Electrochemistry in Spain in the First Third of XXth Century
    Angel Toca
  Contribution of Russian Chemists to Development of Russian Spirit and Vodka Production Industry in the 19th and the Early 20th Century
    Vera Z. Grigorieva, Svetlana Patsaeva
  The Development of Macromolecular Chemistry in Belgium and His Contribution to It in the International Polymer Chemistry Community
    Ali Gharib
  Controversies on the Nature of Caloric in the Greek-speaking Journal Hermes the Scholar, at the Turn of the Nineteenth Century
    Efthymios Bokaris
T09-05 Biological Sciences in the Contemporary Period (1800-)
Room: A12
Tuesday, 28 July, 11.30 – 13.30
Chair: Miklós Müller

Advances in Modern Biology Can Be Accelerated by Meaningful Crosstalk between Physicists and Biologists
Sukhendu B. Dev

Ervin Bauer and General Biology in the All-Union Institute of Experimental Medicine: Rise and Fall of a Major Soviet Laboratory
Miklós Müller, Gábor Elek, Sergey S. Zhebrovsky

Russian Biologists at the Mediterranean. Second Part of the 19th – the Beginning of 20th Centuries.
Sergei I. Fokin

Between Science and Technology: The Catalan Structuralist School, the Nucleohistone Structure and the Development of X-Ray Diffraction Cameras
Francesc-Xavier Calvó-Monreal

Tuesday, 28 July, 15.00 – 17.00
Chair: Janina Wellmann

Affiliation and Collaboration Networks in the Biomedical Sciences in Portugal in the Inter-war Period (1920-1940)
José Pedro Sousa-Dias, Ricardo S.R. Santos

Critical Thinking: Historical Perspective and Present Situation in Turkey
Melih Tumuçin

Janina Wellmann

History of National Institute of Genetics in Japan
Hajime Mizoguchi

Tuesday, 28 July, 17.30 – 19.30
Chair: Miguel García-Sancho

Edward Janczewski’s Work on Monographie des Grosseliers, a Monograph on Genus Ribes (1907)
Kamil Kulpinski

Historiographical Issues in the Introduction of Protein Sequencing into Spanish Biomedical Research, 1970-1990
Miguel García-Sancho

The Significance of Science Instruments in the Research Progress and Development Plant Physiology in Nineteenth Century. Research Instruments of Polish Scientist Emil Godlewski Senior (1847-1930)
Izabela Krzępowska-Moszkowicz

Polish Botanical and Mycological Research in Terrestrial Ecosystems of Antarctica Since 1977
Piotr Köhler
Wednesday, 29 July, 09.00 – 11.00
Chair: Tomohisa Sumida

Lithuanian Space Plant Biology Researches in 1975–1990
Aurika Ričkienė

Comparative Anatomy, the Chain of Beings, and French Zoology after Lamarck
Emmanuel D'Hombres

Tomohisa Sumida

Early Apparatus-based Experimental Psychology
Maximilian Wontorra, Ingrid Kästner, Erich Schröger

Wednesday, 29 July, 11.30 – 13.30
Chair: Jakov Dulčić

Brief History of Ichthyology in Croatia
Jakov Dulčić

Electrography of Living Systems or So-called Kirlian Photography, Reconstruction of Historical Fairness and Present Potential
Olga A. Gaponenko, S. Raikov

The Finnish Tradition of Developmental Biology
Anto Leikola

Morgan's Change of View on Evolution, 1903-1932
Lilian Al-Chueyr Pereira Martins

T09-06 Medicine in the Contemporary Period (1800-) Room: A1

Tuesday, 28 July, 11.30 – 13.30
Chair: Claude Debru

Laboratories at the Medicine Faculty of Coimbra University in the XIX Century
Maria Carvalho Burguete

The Appliance of Science? The Laboratory and Clinic in Early-twentieth-century Scottish Psychiatry
Gayle L. Davis

Personnel Monitoring and Evaluation Dosimetry
Anthony K. Shadrack

Ramon y Cajal and the Law of the Dynamic Polarisation of the Neuron
José Luis González Recio, Francisco José Serrano Bosquet

Tuesday, 28 July, 15.00 – 17.00
Chair: Benedek Varga

The Development of Pharmaceutical Industry in Serbia
Irena Mandic, Dusanka Krajnović
Historical Development of the Emergency Medicine in Turkey
Ozgur Tatli

Medical Science in XIX Century in Georgia and its Social-Cultural Framework
Nino Chikhladze, Ramaz Shengelia, Nato Pitskhelauri

Aspirations and Conflicts: The ‘Professionalisation’ of Medicine in Colonial Banaras
Madhuri Sharma

Tuesday, 28 July, 17.30 – 19.30
Chair: József Honti

Odessa City Hospital (the 1st Century of Activites)
Svitlana Ruda

Serotherapy and Modernity in Turn-of-the-century Paris
Jonathan Simon

Computer Tomography Scanner: A Revolutionary Instrument
Mei Zhou

New Medical Ideas in Old History of Medicine
Nato Pitskhelauri

Wednesday, 29 July, 09.00 – 11.00
Chair: Maria Carvalho Burguete

Language, Information, Instruments and Medical Treatment – The Medical Assessment by Japanese Doctors at the Beginning of the Meiji Era, Japan
Miyoko Tsukisawa

Cut up and Imaged: Late 19th-century Representations of the Cortex
Heini Hakosalo

Chinese Medicine and Western Medicine on the Way of Scientific Advances and Integration.
Yulia Petrovna Chukova

A Quest for the ‘Modern’: Localizing versus Universalizing Knowledge
EunJeong Ma

Wednesday, 29 July, 11.30 – 13.30
Chair: Dénes Karasszon

Veronika Hofer

US ‘Shopping List’ of Human Experimentation Data Presented by Former Japanese B.W. Units, Ishii Organization
Keiichi Tsuneishi

La Circulation d'Idées Scientifiques: Une "Assemblage de Liens" dans les Premières Revues Médicales de São Paulo
Marcia Regina Barros da Silva

L’Appareil Enregistreur Générale de François-Franck (1849-1921)
Liborio Dibattista
T09-07 Technology in the Contemporary Period (1800-)
Room: A6
Tuesday, 28 July, 11.30 – 13.30
Chair: Alexandre Herlea

Micro-alloying in Early Iron Age: A Case Study from Badmal, Orissa
Pradeep KBehera, Subhaya Chattopadhyay, Prasanta K. Datta

Making of Sound Recording in Late XIX Century and Modern Problems of Restoration and Preservation of Old Audio Media
Roman V. Artemenko

Development Trend and Results of Industry in the Era of the Dual Monarchy of Austria-Hungary
Zsuzsanna Bognár

The Ways of Searching “Rusalka” Coast Guard Battleship (1893-1894)
Vladimir O. Chikin

Tuesday, 28 July, 15.00 – 17.00
Chair: Alex Keller

270 Years of Lightning: A Historical Review
Javier Lopez-Herrera, David de la Vega, María de las Mercedes Maruri

Large Infrastructural Systems in the Extreme North: Learning from the Build-up of Water- and Wastewater Systems and Railway Electrification in Sweden
Kristina Söderholm, Roine Wiklund

The Complexity of the Concept Materia Technika
Elena I. Helerea, Liviu Alexandra Sofonea, Laura Rab, Daniel Calin

Evolution of e-Books in Turkey and in the World
Sakine Sensoy-Onçoğz, Adnan Baki

Wireless Phone in Szombathely at the Turn of the 19th and 20th Centuries
József Nemes

T09-08 Engineering in the Contemporary Period (1800-)
Room: A13
Saturday, 1 August, 17.30 – 19.30
Chair: Zoltán Galántai

Manabu Kobayashi

The International Context of the Technological Changes of the Slovak Power Engineering Base in the First Half of the 20th Century
Miroslav Sabol, Ludovit Hallon

From LEDs to Solid-state White Lighting Devices, Another Semiconductor Revolution
Vasilica Schiopu, Ileana Cernica, Alina Matei

Engineers and Conservatives in the Creation of State Hydroelectric Power in Canada
Langins Jants
T09-09 Space Exploration and Research in the Contemporary Period (1800-)
Room: C2
Friday, 31 July, 17.30 – 19.30
Chair: Attila Szabó T.

- Hubble Space Telescope’s Several Lives and Unexpected Career
  Joseph N. Tatarewicz
  Janet Vértesi
- Space Exploration and Research in the Contemporary Period
  Ven. Dharmananda Shraman
- The Three Heroes of Spaceflight: The Rise of the Tsiolkovsky-Goddard-Oberth Interpretation and its Current Validity
  Michael J. Neufeld

T09-10 Computing Sciences and the Internet in the Contemporary Period (1800-)
Room: A9
Saturday, 1 August, 09.00 – 11.00
Chair: Bálint Dömölki

- The First Hungarian Electronic (Tube) Computer – the M-3 – is 50 Years Old
  Győző Kovács
- The Cultural History of Character Encoding
  Daniel L. Golden
- The Social Construction of Computers Aided by Social Network Analysis
  Éva Borbély
- Searching Methods in Artificial Intelligence
  Angel Garrido
- History of Computer Science in Russia
  Yakov I. Fet

T09-11 Geography in the Contemporary Period (1800-)
Room: A11
Saturday, 1 August, 17.30 – 19.30
Chair: Alexey Postnikov

- Paper Fortresses: Renaissance Military Architecture in the Context of Hapsburg Cartography
  Zsolt G. Török
- Experience and Rhetoric in Sixteenth Century Spanish Atlantic Cartography: Utility and Conformity in Double Graduation Charts
  Antonio Sánchez
Perception of Geographical Features and the General Concept of “Shui-kou” in the Feng-Shui Thought of East Asia
Shizuaki Shibuya

Alexey Postnikov

T09-12 Social Sciences in the Contemporary Period (1800-)
Room: C3

Wednesday, 29 July, 15.00 – 17.00
Chair: Jenny Bangham

Ghislaine Idabouk

On the Threshold of Modernity. Alva and Gunnar Myrdal vs. Eli and Ebba Heckscher on the Subject of Science and Social Welfare.
Ylva J.E. Hasselberg

Epistemological Conditions for a Successful Transfer of Policy Relevant Knowledge: A Lesson from the History of Central Banking
Arie Krampf

Helmholtz Resonators and the Mechanistic Revolution in Psychology
Zuraya Monroy-Nasr

Wednesday, 29 July, 17.30 – 19.30
Chair: Arie Krampf

Hungarian-Chuvash Economic and Cultural Contacts in the Current Context
Marina Grigoryeva

The Evolution of Man in the Late Nineteenth Century: Darwinism and the History of Human Marriage
Jenny Bangham

T09-13 Natural History in the Contemporary Period (1800-)
Room: A16

Saturday, 1 August, 09.00 – 11.00
Chair: Adriana T. do A. Martins Keuller

Sir Robert Schomburgk's Biodiversity Science Legacy in Guyana
John Cartey Caesar

Emergency of the Mexican Physical Anthropology in 19th Century, within the Context of the European Imperialistic Expansion
Miguel Garcia Murcia

Zoology in the Library of Martorell Museum of Natural Sciences of Barcelona, since 1882 to 1915
Jose J. Varela Restrepo
Saturday, 1 August, 11.30 – 13.30
Chair: Ewa Kaczmarzyk

- Seeing Past Specific Behaviors: Classical Ethology’s Failure
  Jean-Sébastien Bolduc

- Floristic Research of the Czestochowa Upland (Poland) between the Middle of the 19th Century and the End of the First World War
  Ewa Kaczmarzyk

T09-14 Environmental Studies in the Contemporary Period (1800-)
Room: A6

Friday, 31 July, 11.30 – 13.30
Chair: Libby Robin

  Libby Robin

- Sustainable Development on Community Livestock. A Case of North Eastern Province, Kenya.
  Gordon Nyabade

- La Crise Environnementale Globale et la Nouvelle Dynamique du Développement dans des Régions Périphériques
  Marcionila Fernandes

- The Teleconnection between Sea Surface Temperature Analysis from in Situ Data at East Mole, Lagos and Global Warming
  Okuku Archibong Eding

Friday, 31 July, 15.00 – 17.00
Chair: Baisakhi Bandyopadhyay

- A Study of the History of Environmental Science in Social Context in the First Half of Twentieth Century
  Baisakhi Bandyopadhyay

- Historical Ozone Measurements Made in the Habsburg Empire
  Tamas Weidinger, Joseph Pinto, Gyorgyi Baranka, Anett Ivady

- Ancient Waterways and Hydrotechnical Constructions of the European Part of Russia (Historical and Ecological Aspects)
  Vera A. Shirokova, Vassili M. Chesnov

T10 International Scientific Exchange
Room: A6

Friday, 31 July, 17.30 – 19.30
Chair: László Szögi

- The Research on Radioactivity in Portugal and the Institut Curie du Radium
  Isabel M Serra
The Moscow Colloquium on Electroencephalography of Higher Nervous Activity (1958) and Its Impact on International Brain Research
Boleslav L. Lichterman

Conservation Science in Context: Humphry Davy and the Herculaneum Papyri
Frank A.J.L. James

The International Commission on Mathematical Instruction. The Italian Contribution from the Founding to the 1950s.
Livia Giacardi

Saturday, 1 August, 09.00 – 11.00
Chair: Isabel Serra

The Brazil-Germany Relations in the Context of Psychiatry
Cristiana Facchinetti

International Eugenics: Reexamining the Relationship between British and German Eugenicists prior to the Second World War
Bradley W. Hart

T11 Scientific and Technical Museums
Room: A3
Saturday, 1 August, 11.30 – 13.30
Chair: Elisabeth Kóczián-Szentpéteri

A Collections Development Strategy: Selecting Artifacts for the Interpretation of Canadian Agricultural Science and Technology
Franz M. Klingender

National Technical Museum in Prague for the Future: Reconstruction of Historical Buildings and New Exhibitions, the Architectural Heritage Centre
Ivana Lorencova

The Research and Public Diffusion of Science and Technology in the Museums
Myriam Garcia, Belen Laspra

Saturday, 1 August, 15.00 – 17.00
Chair: Judit Berta-Varga

Xiping Cao, Erping Zhang

Science and Technology Museum and Archives – A Joint Study of Funds for Obtaining New Information
Yuriy Ivanovich Krivonosov

Engines and Society: Museological Interpretation of Industrial Heritage
Joan Muñoz Vicente, Santiago Vallmitjana

Table Top Physics: Old Science, New Audience
Jane Wess
Saturday, 1 August, 17.30 – 19.30
Chair: Éva Vámos

The Role of Small Technical Museums in Preserving the Cultural Heritage
Ante Sekso-Telento, Ivan Sekso-Telento, Josip Trbus, Sándor Jeszenszky

Microscope History Virtual Museum
Nikolay Koltovoy

T12 The Formation of Scientific Languages
Room: A2

Wednesday, 29 July, 17.30 – 19.30
Chair: Teodora Daniela Sechel

The Development of Symbolic Languages in the Field of Logic (1854-1903)
Amirouche Moktefi

The Birth of the Mediaeval Hebrew Mathematical Language
Ilana Wartenberg

Medicine and the National Languages in the Habsburg Monarchy (1770 -1830)
Teodora Daniela Sechel

Semantic Reflectiveness in Developing English Pharmaceutical Terminology
Leontina Kerni, Dušanka Krajnović

T13 The Evolution of Teaching and Public Involvement
Room: A10

Saturday, 1 August, 17.30 – 19.30
Chair: Felicitas Seebacher

Learning in the Lab: High School Science Teaching in Ontario, 1880-1921
Michelle D. Hoffman

The Teaching of Radiochemistry in Portugal
Francisca Viegas, Cristina Felizardo, Elisa Maia

Kant Meets Comte amidst Industrial Confusion: The Formulation of the Idea of
Applied Science in 19th Century Britain
Robert Bud

“Elementary” Texts as a Scientific Genre in Eighteenth-century France
Jeffrey L. Schwegman

Ideas of Modern Natural Sciences as the Instrument for Formation of People Rational
Thinking
Olga Naumovna Golubjeva

Modern Mathematics at the Center for the Teaching of Sciences of Bahia (Brazil),
1965-1969
Freire Inês, André Luís Mattedi Dias
T14 Scientific Institutions - Learned Societies
Room: A6

Saturday, 1 August, 11.30 – 13.30
Chair: Jouzas Algimantas Krikstopaitis

Academies of Science in 18th-century Europe and the Application of Scientific Methods on Exploration – A Comparative Study
Jan E.A. Vandersmissen

Academic Drift among Scientific Institutions – Necessity or Serendipity?
Thomas Kaiserfeld

The Missing Link in Science Communication: The Role of Learned Societies and Popular Journals
Jørgen Burchardt

Saint-Petersburg Academy of Sciences in 1855-1917: Projects of Reform
Ekaterina Yu. Basargina

Saturday, 1 August, 15.00 – 17.00
Chair: Jørgen Buchardt

École Polytechnique de Lisbonne versus École Polytechnique de Paris
Pilar B.G. Pereira

The Role of the Japanese Cultural Background in the Formation of Engineering Education: In the Case of the Imperial College of Engineering, 1871-1886
Masanori Wada

Moscow Society of the Friends of Natural Sciences, Anthropology and Ethnography and Popularisation of Scientific Knowledge in the 19th Century Russia
Galina G. Krivosheina

Learned Society as Promoter of Education and Intellectual Activity: Baltic Case
Jouzas Algimantas Krikstopaitis

T15 Art and Science
Room: A14

Wednesday, 29 July, 09.00 – 11.00
Chairs: Dénes Nagy, Assimina Kaniari

Art and Science in a Split Culture – A General Outlook and a Case Study: Breaking Leonardo’s Vitruvian “Code” and the Golden Section with Less “Gold”
Dénes Nagy

Post-war Biology, Avant-Garde Art and the Social Life of Scientific Ideas at the Festival of Britain 1951: L.L. Whyte, D’Arcy Thompson and ‘Form’
Assimina Kaniari

Carnap’s Universal Metaphor: Art and Structural Objectivity between the Wars
Boris Jardine

Imre Lakatos’ and Emmanuel Levinas’. Approaches to the Natural and Human Sciences.
Natalie E. Ross

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Wednesday, 29 July, 11.30 – 13.30  
Chairs: Dénes Nagy, Geert Vanpaemel

- Bringing the Laboratory into the Museum of Fine Arts  
  Geert Vanpaemel

- L’Architecte, le Dessin et la Science, Formes du Savoir dans la Construction  
  Nathalie Huyghues des Etages

- New Results of the Arthistorical Researches of the Renaissance Frescoes of the Archbishop Johannes Vitéz’s Studiolo in Esztergom /Hungary/  
  Mária Prokopp

- The Restoration of the Renaissance Mural Painting „Virtues”, in the Studiolo of Johannes Vitéz, at the Castle Museum of Esztergom, New Researches and Results  
  Zsuzsanna Wierdl

Wednesday, 29 July, 15.00 – 17.00  
Chairs: Dénes Nagy, Oscar Joao Abdounur

- Prospective Dwelling: From Utopian to Iconic Habitats  
  Jorge Croce Rivera

- An Exhibition on the History of the Interrelationships between Mathematics and Music  
  Oscar Joao Abdounur

- The Art, Science, and Technology of Electrifying Music  
  Pierfrancesco Lostia

- A Literary Figuration of Alchemy; Novelist Park, Sang-ryoong’s ‘A Study of Death’  
  Myungshin Kim

Wednesday, 29 July, 17.30 – 19.30  
Chairs: Iván Urbán, Bogdan Zemanek

- Caravaggio’s "Boy Bitten by a Lizard", an Epileptic Contagion between History of Medicine and Folklore  
  Mauro Di Vito

- History of Botany and Science - Nature - Culture Relations; Interdisciplinary Symposia in Cracow (Poland)  
  Alicja Zemanek, Bogdan Zemanek

T16 Science and Society  
Room: A1

Wednesday, 29 July, 15.00 – 17.00  
Chair: Tihamér Margitay

- Preliminary Notes for a History of the Popularization of Quantum Physics in Spain  
  María C. Boscá

- Science and Society in the Context of Contemporary Socio-economical and Ecological Problems  
  Zulfira Sherpaevna Gagaeva
The Professional and Public Recognition of Scholar
Oleksandr Fedorovych Konovets

Organizing Nordic Eugenics in the 1920s
Sven Widmalm

Wednesday, 29 July, 17.30 – 19.30
Chair: Sven Widmalm

The Institute of Race Biology in Sweden – Social Networks and Media Strategies
Maria Björkman

A Survey of Objective Transfer of Science and Technology Policy in European Union
Xinying Fang

Role of Nanotechnology in Optoengineering Development
Vladimir Gurikov

The Nobel Prize Complex in South Korea: Historical and Sociological Considerations
Sungook Hong

Thursday, 30 July, 15.00 – 17.00
Chair: Sungook Hong

Transition to Post-academic Science: Performance Indicators and Trust in Science
Tihamér Margitay

The Architectural History of a Chinese Village
Yuan Wang

Not Only Fermi. Edoardo Amaldi and the Rebirth of the Italian Physic
Luca Malagoli

The Biodiversity and Ecosystem Function Research Field: Intersections between Science, Politics, and the Public
Marcela Zalamea

Thursday, 30 July, 17.30 – 19.30
Chair: Marcela Zalamea

Public Concern about Animal Experimentation and the Russian Academy of Sciences in 1904-1906
Natalia E. Beregoy

Women and Civilization in the Thought of Edvard Westermarck (1862–1939)
Niina M. Timosaari

Investigative Report of State-owned Coal Mines for the Purpose of Understanding the Relationship of Science and Society in Mainland China
Li He

The Role of Shipbuilding and Navigation in the Development and Expansion of Mankind Civilization
Vladimir Nikitich Krasnov

Friday, 31 July, 11.30 – 13.30
Chair: Natalia E. Beregoy

The Role of Science-documentary Movies in the 1930s' in Hungary
Soma Redey
A Comparative History of the Formation of Passive Building Technology
Naoki Takuma, Hideto Nakajima, Naoki Yamano

The Relationship between Science Journals and the Media: A Lasting Marriage
Germana F. Barata

Social Phenomenon of Continuity of Scientific Schools of Statistical Physics in Ukraine
Alla S. Lytvynko

Friday, 31 July, 15.00 – 17.00
Chair: Soma Redey

Critical Assessment of Nikola Tesla's Legacy for Contemporary Science and Society
Tomislav Petkovic

The Role of the Referee in Royal Society of London at Nineteenth Century
Adriana Mattos

Image, Scientific Expedition, the Public, and Nation in Brazil (1870-1930)
Moema de R. Vergara

The 1853-1856 Cholera Morbus Epidemic in Portugal as Seen by the Press
Maria Antónia P. Almeida

T17 Science and Culture
Room: B3

Saturday, 1 August, 09.00 – 11.00
Chair: Roger Hahn

Measurement of Time, Length and Area in Southern India around 10th Century AD
B.S. Shylaja

Laboratory Culture in Academia
Truus Van Bosstraeten

Narrating the Beehive
Tania Munz

Credit for Idea, Credit for Experiments: the Authorship of the Doctoral Dissertation in Laboratory Sciences in the Eighteenth Century
Ku-ming (Kevin) Chang

Saturday, 1 August, 11.30 – 13.30
Chair: Tania Munz

Spinoza’s Place in the Genesis of Early Modern Psychology
Igor S. Kaufman

La Femme et l'Univers Végétal dans la Botanique Mise à la Portée de Tout le Monde
Fernando Calderón

Visuality and Portentous Weather in Early Modern Culture
Matja Kallinen

Collecting Practices and Circulating Objects: The Material Culture of Sciences in Mid 19th Century England
Anastasia Filippoupolitis
Saturday, 1 August, 15.00 – 17.00
Chair: Mihály Beck

Japanese Chemical Industry and the “Chemicalization of Everyday Life” in East Asia, 1895-1945
Shao-li Lu

The Former Headquarters of the Board of Public Health and Its Role in Sanitary Reform at the Beginning of the 20th Century
Benedito Tadeu Oliveira

Biopolitics and Cultural Heritage in Brazil: The Nation Versions between World Wars
Joel Birman

Danjon and French Astronomy during the Second Part of the 20th Century
John T. Blackmore

Saturday, 1 August, 17.30 – 19.30
Chair: B.S. Shylaja

Science in Culture and Culture in Science: Intertwining Experiences for Stimulating Curiosity in Children
Breda Čebulj Sajko

The Language of Science in a Globalizing World
Anna N. Gorodishcheva

Anti-Science: Its History and Features
Hongxia Sun

Bringing Science Communication to Public Behavior
Junping Hu

T18 Trans-cultural Diffusion of Science
Room: A12

Saturday, 1 August, 15.00 – 17.00
Chair: Imre Hronszky

Transformation and Assimilation: The Response of Chinese Literati to Western Crystalline Sphere in the Late Ming and Early Qing Period
Chengsheng Sun

Cultural Controversy in 18th Century England: The Transmission of Variolation
Alicia Grant

The Introduction of the Smithsonian Meteorological System in Japan
Kae Takarabe

Des Objets aux Gestes: Une Archéologie de l’École de Pharmacie de l'Ouro Preto, Minas Gerais, Brésil: 1890-1920
Myriam Bahia Lopes

Saturday, 1 August, 17.30 – 19.30
Chair: Myriam Bahia Lopes

Les Enjeux d'Un Média Visuel dans l'Entre-deux-guerres
Florence Riou
Paradigm of Transference of Sciences for Example Andalusia in Final of Medieval
Mohamadreza Pak

La Géologie en Algérie (fin XIXe-milieu XXe siècles): Origines et Développement d’Une Discipline au Service de l’État en Contexte Colonial
Yamina Bettahar

T19 Technology Transfer
Room: C4
Friday, 31 July, 17.30 – 19.30
Chair: Maria Elvira Callapez

The US Foreign Policy in the Early Period of the Cold War and the Introduction of Television Broadcasting and Atomic Energy to Japan
Kenzo Okuda

Digitization like Science
Rimvydas Lauzikas

Technology Transfer Constraints and the Portuguese Polymer Industry
Maria Elvira Callapez

Mercury Amalgamation in Hispanic America: Globalization of a Mining Technique in the Sixteenth Century
Jeannette Graulau

Ákos Varga

Analysis of the Soviet Technology Transfer in the Development of China’s Nuclear Weapons
Yanqiong Liu

T20 Gender in Science and Technology
Room: A3
Wednesday, 29 July, 15.00 – 17.00
Chair: Éva Vámós

Women Investigators at the Institute for Heredity Research in Berlin 1912-1928/33; First Results
Ida H. Stamhuis

Women Scientists and the Culture of Different Laboratory Practices – From the Industry to the Kaiser Wilhelm Society and Vice Versa
Annette B. Vogt

Women-scientists as an Object of the Governmental Propaganda in Soviet Union before the World War II
Olga A. Valkova

The Current Situation of Female Researchers in Japan
Mariko Ogawa
Wednesday, 29 July, 17.30 – 19.30
Chair: Ida Stamhuis

Gendered Elements in Chemical Thermodynamics: A Model for Conceptualizing Gender Ideology in the Content of the Physical Sciences
Ágnes Kovács

A Gender Perspective on Research Careers in Science and Technology during the Economical Transition in Russia
Anne-Sophie Godfroy-Genin, Vera Uvarova

Empowerment Process in the Rural Woman Promoting by Public Policies
Maria Almanza, Paola Olivares

Pain and Child Birth: A Journey through the History of Obstetrics’ Anaesthetics in the 19th Century
Maria Alexandra Valadas

Gender, Culture and Power in the Social Construction of Menopause
Rebeca B. Fertrin, Lea Velho

T21 Science and Political Context
Room: C2
Friday, 31 July, 11.30 – 13.30
Chair: Péter Szegedi

Ottoman Decadence Reflected in Dr. Essad's Ophthalmoscope
Seref Etker

History of Science and Nation-building: Identifying the “Turkish Contributions to Science,” 1870-1950
M. Alper Yalcinkaya

“For Paupers only!” The General Policlinic Vienna: Policy Laboratory and Counter University
Felicitas Seebacher

Did G. Mendel's Political Involvement Interfere with His Scientific Achievements during the Period 1853-1865?
Christiane L. Nivet

Friday, 31 July, 15.00 – 17.00
Chair: Mitchell Ash

Science, Nationalism and (Multi)Culturalism in the Late Habsburg Monarchy 1848-1918: A Preliminary Overview of the Issues
Mitchell Ash

Complementary or Competitive? National and International Science in 19th Century Habsburg Monarchy.
Jan J. Surman

„Staatsnation”, „Kulturnation”, „Nationalstaat”. Chances or Risks for Science and Scholarship in the Late Habsburg Monarchy?
Johannes Feichtinger

Scientific Nationalism
Gábor Palló
Saturday, 1 August, 09.00 – 11.00
Chair: Mitchell Ash

Patriotism, Nationalism and Internationalism. Chemists in the Czech National Enlightenment.
Soňa Štrbáňová

To Be a Good Son of One’s Nation… Czech Historians between National Program and Scientific Style
Antonín Kosílan

Racial Sciences in Hungary in the Decades around 1900
Emese Lafferton

Anthropological Disciplines in the Late Habsburg Monarchy
Irene Ranzmaier

Saturday, 1 August, 11.30 – 13.30
Chair: Joao Rangel de Almeida

Instruments of Paper, Overseas Agents, Distant Natural Objects: On the Spanish Instructions of the 18th Century
Marcelo Fabián Figueroa

Vinegar, Fire and Smoke. Quarantine and Purification in the 1830-1851 Mediterranean Sea.
Joao Rangel de Almeida

Nurses during the Spanish Civil War: The Political Participation of Women through Medical and Welfare Care
Dolores Martin Moruno

Archaeology in the Tropics: Science and the 20th Century Portuguese Colonial Agenda
Ana Cristina Martins

Saturday, 1 August, 15.00 – 17.00
Chair: Valentin Bazhanov

Popular Medical Manuals and Guidebooks in Late-18th Early-19th Century
Betania Goncalves Figueiredo

Ideology and Mathematical Logic: The History of Soviet-Hungarian Ties before and after World War II
Valentin A. Bazhanov

Imperial Ears: Ogawa Naoyoshi and the Colonial Linguistics in Early Twentieth Century Taiwan
Feng En Tu

Philosophical Roots of Boris Hessen: A Criticism against the Myth of Hessen’s Externalism
Pablo Huerga Melcón

Saturday, 1 August, 17.30 – 19.30
Chair: Fabio de Sio

An Ivory Tower Downtown: The Rise and Fall of the “Area per la Ricerca” in Naples (1965-1970)
Fabio De Sio, Mauro Capocci
The Politics of Anatomy in Vienna
*Tatjana Buklijas*

Plague, Cholera and the Expansion of Habsburg Medicine to the Ottoman Empire 1840-1860
*Marcel Chahrour*

The Diaries of an Outstanding Physicist and Historian of Science – Sergey I. Vavilov
*Vladimir Mikhailovich Orel, Yury Ivanovich Krivonosov*

**T22 Methodology and Sources for the History of Science and Technology**
*Room: A6*

**Wednesday, 29 July, 15.00 – 17.00**
*Chair: Levente Csóka*

- 10 Years in the Research of the Water-powered Up-and-down Sawmill Programme in Szeklerland (Eastern Transylvania)
  *Tamás Pauló*

- The Role of Old Globes as a Multidisciplinary Source, in the Birth and Emergence of Porto University
  *Mónica C. Ramalho Oliveira*

- The Material Culture of the First Experimental Tests of Bell’s Theorem: An Analysis of the Experimental Apparatus (1972-82)
  *Wilson Fábio de Oliveira Bispo*

- Historical Development of Doors and Windows in the Carpathian Basin
  *Tamás Szemerey, Levente Csóka*

- The Bending Techniques of Wood in a Historical View
  *Sándor László Tóth*

**Wednesday, 29 July, 17.30 – 19.30**
*Chair: Thomas A. S. Haddad*

- Aesthetic Principles in Evolution of Physics
  *Svitlana D. Gapochenko*

- Taking Practices as an Explanatory Source: Toward a Post-Needham Historiography of Chinese Science
  *Xiang Huang, Sergio Martínez*

- Astronomy and History of Astronomy in the Jesuit Mémoires de Trévoux (1701-1762): An Assessment of Themes and Modes of Presentation
  *Thomas A.S. Haddad*

- Hipparchus vs. Ptolemy and the Antikythera Mechanism. Pin/Slot Device Models
  *Elias Gourtsoyannis*

- Lunar Motions
  *Elias Gourtsoyannis*

- On Metrology of Bukhara Emirate of the End of XVIII – The Beginning of XX Centuries
  *Mahmudjon Sh. Kholov*
T23 Science and Philosophy
Room: C2

Tuesday, 28 July, 11.30 – 13.30
Chair: Wojciech P. Grygiel

The Problem of Quality and Quantity in the Development of Science from Ancient Times to Present
Erwin Neuenschwander

Philosophy of Mathematics in the Warsaw School of Mathematical Logic: Tarski and Mostowski
Roman Murawski

The Role of Historical Approach in the Emergence of New Humanist Philosophy of Mathematics
Olga Kiss

Philosophy of Mathematics and Effects on Mathematics Education
Tuba Gökçek

Tuesday, 28 July, 15.00 – 17.00
Chair: Erwin Neuenschwander

Science and Philosophy
Kajal Sraman

The Relationship between Science and Philosophy – Historical and Theoretical Aspects
Boris Chendov

Enjeux Entre les Approches Historique et Logique de la Recherche Scientifique
Fabio Tenorio de Carvalho

Eugene Wigner and Philosophy: The Steps of his Philosophical Formation
Frederik M. dos Santos

Tuesday, 28 July, 17.00 – 19.30
Chair: Boris Chendov

Cultural and Historical Coexistence and Irrelevance of Presentist/Eternalist Debate
Alain Ulazia

Man’s Determination of Nature’s Cognition
Yuriy Kulkov

Non-cognitive Values and Applications of Scientific Theories
Kelly I. Koide

Casus or Philosophy and Representation of the Singular?
Natalia A. Kolodiy, Tatiana Konyukhova

Wednesday, 29 July, 09.00 – 11.00
Chair: Olga Kiss

History of Quarks as the Witness of Instrurealism in Observational-theoretical Distinction: Reconciliation of Scientific Realism and Instrumentalism
Musa Akrami
Physics-likeness of Science  
Peeter Müürsepp

Historical Reasons and Possible Ways of the New Scientific Synthesis  
Alexander E. Egoyan

**Wednesday, 29 July, 11.30 – 13.30**  
Chair: Peeter Müürsepp

Was Einstein Right about Quantum Mechanics?  
Fátima Masot Conde

Le Développement de la Théorie de la Relativité dans le Milieu Philosophique Français dans les Années 1920: Une Étude à Partir de l’Épistémologie Bach  
José Ernane Carneiro Carvalho Filho, Michel Paty, Elyana Barbosa, Aurino Ribeiro Filho

String Theory – The Fall of Science?  
Wojciech P. Grygiel

Einstein and Newton; Two Giant Philosophers – Scholars: Relativity Absorbs Quantum Gravity and Negates Absolute!  
Shiva Kaviani

**T24 Science and Military Affairs**  
Room: A7

**Friday, 31 July, 17.30 – 19.30**  
Chair: Emese Szoleczky

Turning Organic Chemistry into ‘a Science rather than an Art’: The Role of the US Military during and after World War II  
Stephen J. Weininger

The Quest for National Fuels, an International Matter of the Interwar  
Camille Molles

Working Out of the Laser Weapon under the Program «Star Wars» in the USA  
Anatoly Djemin

**T25 Modernization and Development**  
Room: A4

**Wednesday, 29 July, 15.00 – 17.00**  
Chair: Eldar M. Movsumzad

Forgotten “Industrial Warriors”: The Boom of Vocational Training in South Korea, 1967-1986  
Tae-Ho Kim

A Review of the Observations of the Historian Kume Kunitake on Chemistry Education, Mining and Chemical Manufacturing in the West and in Japan in the True Accounts of the Iwakura Embassy to the United States of America and Europe 1871-1873  
Yona Siderer, Masanori Kaji
Development of Transport Systems for Oil and Gas Delivery from Offshore Fields
Anna Lokshina, Ildar Shammazov

Bulgarian Dairy Industry Meets the (West) European, 1910-1940
Elitsa R. Stoilova

Wednesday, 29 July, 17.30 – 19.30
Chair: Yona Siderer

The Gas Hydrocarbon Stock for Electroenergetic
Eldar M. Movsumzade, E.S. Bogacheva, M.Y. Karisalov, A.V. Borodin

Development of Mathematical Methods and Information Technology
T.A. Aliyev, N.Ch. Movsum-zade, Abdula E. Karayev

Development of Helium Industrial Production from Natural and Casing-head Oil Gases in Russia
Alik M. Syrkin, E.V. Stolypin, V.I. Stolypin, N.L. Egutkin

Evolution of the Technologies and Technical Means for Offshore Oil and Gas Fields Development
Boris N. Mastobaev, Ayrat M. Shammazov

T26 Technology and Society
Room: A2

Tuesday, 28 July, 11.30 – 13.30
Chair: Lilyia P. Ponomarenko

Strategies for Simulation of View in the Production Agroindustry
Rubén D. Bonilla Isaza, Milton Mauricio Herrera Ramírez

L’Usage du Marbre dans la Construction des Églises: la Technique au Service de la Symbolique dans la Spiritualité Chrétienne
Joëlle Petit

De la Parade au Changement Climatique: Homme, Habitat et Isolation Thermique
Dominique Theile

The Plot of Concrete in Brazil: A History of the Technology Diffusion of Reinforced Concrete
Roberto Eustaáquio dos Santos

Tuesday, 28 July, 15.00 – 17.00
Chair: László Tóth

Risk Assessment and Risk Society: Winners and Losers in Genetic Discourse
Maria Alexandra Valadas, Carlos Melendez

Shattered Hopes – The Swedish Wood Gas Experience
AK Helena Ekerholm

A Chain of Technological Development in Japan after the WW II and Social Constructionism of Technology
Tadaaki Kimoto

Telescola: An Educational Television Project Developed in Portugal, in the 1960’s
Mária C. Almeida
Tuesday, 28 July, 17.30 – 19.30
Chair: László Tóth

A Phenomenological Analysis of Facebook
Carlos R. Melendez, M. Alexandra Valadas

Development of High-tech and Social Fairness
Feng Zhang

The Necessity of Control of the Increasing Global Radiation Risk by Way of the
Creation of the Complex System of the Two-united Radionuclide-ecological and the
Medical-genome Monitoring (REMGM)
Alexandr P. Elokhin, Igor Ivanovich Suskov, Alexandr Ivanovich Glushchenko, Alexandr
Prokopevich Elokhin, Larisa Stepanovna Baleva, Alla Evgenevna Sipyagina

The Most Common Technical Systems in the Service of the Mankind – History of Toilets
Petri S. Juuti, Riikka P. Rajala

Wednesday, 29 July, 09.00 – 11.00
Chair: Lillian Hoddeson

Long-term Thinking in Water Services in Finland
Riikka P. Rajala, Petri S Juuti

Information Society as Surveillance Society
László Molnár

Showmanship and Technological Futurism: The Middleton Family at the 1939 New
York World’s Fair
Jaume Sastre-Juan

GM Rice Trial in Japan: Its Historical Background and Meaning
Takako Nakajima

Wednesday, 29 July, 11.30 – 13.30
Chair: László Molnár

Public Opinion towards Biotechnological Applications: Example of Turkey
Oğuz Ozdemir

One of the Ways to Solve Power and Environmental Problems: Application of the
Superconductivity
Lilyia P. Ponomarenko

Social Agendas and Transdisciplinary Education as Engines for Radical Scientific
Invention: Stanford Ovshinsky’s Energy and Information Inventions
Lillian Hoddeson

History of Electric Energy in Brazil: The “Electromemory” Project – 1890 to 2005
Gildo M. Santos

Wednesday, 29 July, 15.00 – 17.00
Chair: Carlos R. Melendez, Sándor Jeszenszky

The Public Side of Technology: Patents Publications XVI-XVII Century
Luisa Dolza
A Brazilian in the Genesis of the Electronics Technology  
Francisco A. de Queiroz

New Rurality: Approaches and Synergies. Emergence of an Alternative Development Model  
Noriero Escalante Lucio, Almanza Sánchez María, Torres Carral Guillermo, Ramírez Miranda César Adrián

Political and Cultural Grounds as Driving Force of Soviet Broadcasting Technologies  
Nina A. Borisova

Technology’s Fingerprints on Social Crossroads  
Elena Lacatus

T27 Politics of Technology  
Room: A15  
Saturday, 1 August, 17.30 – 19.30  
Chair: Imre Hronzsky

Negotiating Neighbours – National and Transnational Politics of a Natural Gas Pipeline  
Anna Åberg

The Politics of Dust Suppression in Spanish Coal Mining, 1944-1975  
Alfredo Menéndez-Navarro

Leviathan and the Airplane: The Rise and Fall of the Technological State in Indonesia, 1966-1998  
Sulfikar Amir

T28 Approaches to History of Science  
Room: A7  
Wednesday, 29 July, 09.00 – 11.00  
Chair: Hayo Siemsen

Different Approaches to the History of Science and an Idea of the Optimal Doctoral Programs in the History of Science  
Michał Kokowski

On the Resistance of the World  
Ilksen N. Icen

Ernst Mach and George Sarton: The Genesis of Ideas in the History of Science  
Hayo Siemsen, Karl Hayo Siemsen

Rosalind Franklin and the DNA Double – Helix: Historiographical Accounts  
Marcos Rodrigues Da Silva

Wednesday, 29 July, 11.30 – 13.30  
Chair: Robin W Scheffler

From the Local to the Global. The 'Circulation of Knowledge', a Promising Perspective?  
Bart Karstens

Yangzhou 秀州 Scholars’ Eyes On Jesuit Science: Reflections on the Chouren zhuan  
Ling-Hsuan Shih
Le « Degré Zéro » de la Nanotechnologie : à Propos de Feynman Comme Précurseur
Marcos A.G. Nalli

Interests and Instrument: A Micro-history of Object Wh. 3469 (X-ray Diffraction Powder Camera c. 1940)
Robin W. Scheffler

T29  Darwin 1809-1859-2009
Room: A7

Wednesday, 29 July, 15.00 – 17.00
Chair: György Kampis

The Dialectical Structure of Darwin’s Argumentation
Anna Carolina Regner

History and Philosophy of Science on Trial
David W. Mercer

The Introduction of Darwin in Portuguese Science and Culture (1865-1914)
Ana Leonor Pereira

Pedro R.G. Fonseca

Wednesday, 29 July, 17.30 – 19.30
Chair: István Matskásy

The Development of Darwinism by Ukrainian Zoologists (End of XIXth – Beginning of XXth Century)
Oleg Pilipchuk

What Had Happened if Darwin Had Known Mendel (or Mendel’s Work)?
Pablo Lorenzano

Darwinism and the Study of Behavior: The Case of “Clever Horses from Elberfeld”
Marco Stella

T30  Galileo 1609-2009
Room: A13

Wednesday, 29 July, 09.00 – 11.00
Chair: Lajos Bartha

On Mechanical Science: Leonardo, Tartaglia, Galilei and Lorini
Raffaele Pisano, Danilo Capecchi

Galileo’s Military Compass and the Context for Mathematical Physics
Nikhil Bhattacharya

"La Ragione del Vacuo". Why and How Galileo Measured the Resistance of Vacuum
Cesare S. Maffioli

Observer Point of View as an Argument for Physical Knowledge (from Galileo to Hawking)
Igor D. Nevvazhay

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T31 History of Science in Education
Room: C3

Tuesday, 28 July, 11.30 – 13.30
Chair: Michael R. Matthews

"Les Magiciens de la Lumièrê" or "Wizards with Light", a Film Tracing the History of the Speed of Light
Pierre Lauginie, Serge Guyon, Christine Azémar, Laurent Baraton, Alain Sarfati

Historical Artefacts - Direct and Indirect Evidences for Evolution in Biology Curricula
Gergely Kertész

Science and Worldviews in the Classroom: Joseph Priestley and Photosynthesis
Michael R. Matthews

George Sarton’s Viewpoints on the Teaching of the History of Science
Longhu Qiu

Tuesday, 28 July, 15.00 – 17.00
Chair: Jan Mikes

“The First Days of Electricity”: Teaching Proposal for the Exploration of the History of Electricity Using a Scientific Instrument Collection
Flora Paparou, Alexandra Karaliota

Analyses of the Historical Thermodynamics Contents in the Physical Chemistry Textbooks Used in Brazil
Glaucia M. Da Silva, Leo Degreve, Giovana Aline Moi

New Attitudes to the Technical History Research, by Way of an Example: Modelling of the Electrotechnical Origins in Czech Countries
Jan Mikeš, Marcela Efmertová

Invisible Vapor: Electric Motors from the Perspective of the History of Electricity
Kemal Yurumezoglu, Ayse Oguz

Tuesday, 28 July, 17.30 – 19.30
Chair: Nicla Palladino

Science Students’ Description of an Atom: A Comparative Epistemological Analysis
Ayse Oguz, Husamettin Akcay, Dilek Akyol

The Models of Mathematical Surfaces and the Anaglyphs: Their Historical Origin, Didactics Applications, Actual Use in Image Communication
Nicla Palladino

Coexistence of History of Mathematics and Modern Mathematics
Saeed Banihashemi

Idea of Universal Mathematical Instrument in Jacobi’s Tracts – CANCELLED!!!
Milyausha Ananyeva

Wednesday, 29 July, 09.00 – 11.00
Chair: Gergely Kertész

Outputs of the Science History Course: The Sample of KTU Department of Computer Education & Instructional Technologies
Emine Timuçin, Sakine Sensoy-Öngöz
Historical and Scientific Material in Professional Training of Teachers
Irina Vlasova

Cláudia Faria, Gonçalo Pereira, Isabel Chagas

A Few Stories from Biochemistry and Molecular Biology
Carme Zaragoza Domenech, Josep M. Fernández Novell

Wednesday, 29 July, 11.30 – 13.00
Chair: Thomas L. Isenhour

EPMagazine from the Students to the Students
Angelo Rapisarda

Can You Tell Me What the Science Is?
Zeynep Haliloglu Tatlı, Alişaş Ayas, Rabia Yıldız

History of Science and Philosophy of Science: Analysis of Correlations
Sergey F. Martynovich

The Evolution of Modern Science: Integrating Science into the Humanities
Thomas L. Isenhour

T32 Science in Social Context
Room: A11

Friday, 31 July, 11.30 – 13.30
Chair: Luís Miguel Carolino

Paradox of Interdisciplinarity Revisited (Curriculum Vitae of a Discipline)
György Darvas

Catarina C. Silva

The Formation of a Space-rocket and Radio Technologies: Personality and Politics
Vassili M. Chesnov

Friday, 31 July, 15.00 – 17.00
Chair: György Darvas

The Eclipse, the Astronomer, and His Audience: Federico Oom and the Total Solar Eclipse of 28 May 1900 in Portugal
Luís Miguel Carolino

Scientific Achievements - The Starting Factor of Country Innovative Development
Valery Grigoryev

Interpreting the Cephaloscope: Instruments, Diagnosis, and the Medicalization of the Deaf, 1800-1850
Jaipreet Virdi

Friday, 31 July, 17.30 – 19.30
Chair: Jaipreet Virdi

The Roots of the Modern Social and Welfare State and the Ideas of the Vienna Scientific Essayist on Social Reform Rudolf Goldscheid (1870-1931)
Gudrun Exner
T35 Scientific Instruments

Room: A2

Thursday, 30 July, 15.00 – 17.00
Chair: Vasily Borisov

The Unilever Collection and the Dilemma’s of Collecting Modern Scientific Instruments
Ad Maas

The Project "EPMOSPHERE": The Old French Armillary Sphere of Lomonosov Museum as the Object of the International Education, Restoration, Research
Tatiana M. Moiseeva

Gnomon: A Mediating Instrument for Drawing, through Historical Origin, Morphological Construction and Use
Panagiotis N. Delikanlis

Thursday, 30 July, 17.30 – 19.30
Chair: Steven Turner

Wavefront Sensing, A Non Contact Technique for the Assessment of Optical Instruments
Santiago Vallmitjana, Carme Ferran

An Apparatus for Demonstrating the Imperishability of Forces of Nature
Jan Tapdrup

How the Interferometer Changed Ideas about Nature
Harry H. Mark

Controversy over the Reliability of Wind Tunnels in Early British Aeronautical Research
Takehiko Hashimoto

Friday, 31 July, 11.30 – 13.30
Chair: Stephen Johnston

The Taly Range – An Introduction to a Remarkable Family of Instruments of Precision Measurement
John S. Reid, Michael A. Player

Canterbury Tales: Medieval Instruments in Social Context
Silke Ackermann

Geography, Astronomy and Mathematical Instruments in 16th-century Europe
Katie Taylor

The Planetarium by Hartog van Laun
Hans Hooijmaijers

Friday, 31 July, 15.00 – 17.00
Chair: Paolo Brenni

Telescopes as Decorative Art
Marvin Bolt
Scoping Longitude: Optical Designs for Navigation at Sea  
Richard Dunn

Astronomical Instruments for Gazing and Measuring  
James Caplan

The Schmidt Telescope – A Highlight in Astrophotography  
Gudrun Wolfschmidt

Friday, 31 July, 17.30 – 19.30  
Chair: Gloria Clifton

Teaching and Research: Shifting Trajectories of Science at Georgetown University in the Nineteenth Century  
Dana A. Freiburger

Ranking the Stars; the Magnum Opus of J.C. Kapteyn  
Jan W. Huisman

Astronomical Sites and Instruments as World Heritage: The Case of 19th and 20th Century Observatories  
Françoise C. Le Guet Tully, Jean Davoineau

Advanced Instruments and Informal Scientific Bodies: The First Observations of Venus and Mercury by Radar  
Vasily P. Borisov

Saturday, 1 August, 11.30 – 13.30  
Chair: Richard Kremer

Instruments of Music as Instruments of Science: Hermann von Helmholtz's Sound Sensation Studies, His Classicism, and His Beethoven Sonata  
Alexandra E. Hui

The Early Years of Histological Research at Ghent University (Belgium)  
Kristel Wautier, Alexander Jonckheere, Danny Segers

Bringing Physics to the Physicians  
Robert D. Hicks

What Happened on the East River: The Synergy of Scientific Instrument Development at the Rockefeller Institute and the RF Virus Laboratory  
Darwin H. Stapleton

Saturday, 1 August, 15.00 – 17.00  
Chair: Peggy Kidwell

Doing it by the Book  
Tacye Phillipson

Liebig's Kaliapparat: A Case Study on the Material Culture of Chemistry  
Sara R.D.S. Carvalho

Buying Instruments: Costs of an Experimental Culture. The Case of the Physics Laboratory at Padua University (1847-1857)  
Christian Carletti

En Route to the „German Chronometer“: The Introduction of Precision Timekeeping in the German Mercantile Marine and Imperial Navy in the 19th Century  
 Günther Oestmann
**Saturday, 1 August, 17.30 – 19.30**  
*Chair: Tacye Phillipson*

- **Models as Material Ideas. Teaching Useful Knowledge with Irenical Instruments in the Early Enlightenment**  
  *Kelly J. Whitmer*

- **The Inclined Plane: A New Look at a (Very) Old Instrument**  
  *Steven C. Turner*

- **Scientific Instruments in the Polytechnic School of Lisbon: The 19th Century Collection of Optical Instruments**  
  *I. Marília Peres*

- **Skinner Box in Psychology Didactic Laboratories in Brazil**  
  *Sergio D. Cirino, Kennon A. Lattal, Rodrigo L. Miranda, Robson N. Cruz*

**T36 Studies in the History of Metrology**  
*Room: A8*

**Wednesday, 29 July, 09.00 – 11.00**  
*Chair: Roger Hahn*

- **Foundation for Traditional Chinese Metrology Museum**  
  *Zhelei Xia, Wei Huang, Jiebin Lang, Xinming Jiang*

- **Résolution Numérique d’Un Problème Métrologique: le Pied, la Perche et l’Acre d’Angleterre**  
  *Olivier Reguin*

- **La Métrologie Historique en France Depuis un Demi-siècle**  
  *Jean-Claude Hocquet*

- **La Coordination Métrologique et la Spatialité dans le Cas de Quelques Petites Églises Romanes en Bourgogne**  
  *Masatsugu Nishida*

**Wednesday, 29 July, 11.30 – 13.30**  
*Chair: Jean-Claude Hocquet*

- **A Study on Ying Biao Yi – A New View on the Important Document in the History of Metrology in China**  
  *Yuzhen Guan*

- **On Historical Development of Chinese Metrology**  
  *Zengjian Guan*

- **Material Metrology and the Strange Pyramidology of C. Piazzi Smyth**  
  *Michael J. Barany*

- **The Management of Chinese Time Metrology in the Period of the Tang Dynasty – Administrative Organs, System and Legal Precedent of Clepsydra**  
  *Yong-liang Ji*
Wednesday, 29 July, 15.00 – 17.00
Chair: Lajos Bartha

The Emergence of Macroscopic Quantum Effects and the New International System of Units (SI 2011) Based upon Fundamental Constants
Heinz Luebbig

History of Precise Reading for Measuring Instruments
Eiju Matsumoto

On the Evolution and its Impact of the Metrological Units of Traditional Chinese Medicine in Ancient China
Rentian Ji

Junlin Yu

Wednesday, 29 July, 17.30 – 19.30
Chair: Eiju Matsumoto

The Portuguese Marco – The First Measurement Standard Travelling around the World
Antonio Cruz

The Measurement of the Standard Time in the Republic of China
Vilin Sun

Historical Review on Pre-metric Metrology in the Netherlands
Shigeru Kurosu

T37 Controversies and Methodology in the History of Science
Room: A5

Friday, 31 July, 11.30 – 13.30
Chair: Gábor Zemplén

Leibniz’s Method of Conciliation of the Opposites in a Scientific Controversy
Marcelo Dascal, Erez Firt

Metaphysics, Physics, and Methodology in the Vis Viva Controversy
Idan Shimony

Hume’s Experimental Method
Tamás Demeter

Discussion

Friday, 31 July, 15.00 – 17.00
Chair: Marcelo Dascal

Methodology as an Argumentative Tool in Debates around Newton’s Theory of Light and Colours
Gábor A. Zemplén

Controversy Studies: Another Field of Scientific Meta-expertise?
Gábor Kutrovázt

Discussion
T38 Scientific Controversies
Room: C4

Wednesday, 29 July, 11.30 – 13.30
Chair: Günther Fleck

The Dispute about Culture(s), Controversies in the Social and Cultural Sciences and What We Can Learn from Them.
Manfred Fraunlob

Science between Emancipation and Adaptation
Gernot Stimmer

Intuition versus Science: The Limits of Reason in a World of Emotions
Rainer Born, Eva Gatarik

Wednesday, 29 July, 15.00 – 17.00
Chair: Katalin Martinás

Psychological or Physiological: Which Suit Should We Wear?
Shulamith Kreitler

Therapy According to Diagnosis or Vice Versa?
Dagmar Eigner

Science or Pseudoscience: The Strange Case of Parapsychology
Günther Fleck

Wednesday, 29 July, 17.30 – 19.30
Chair: Rainer Born

Miller's Experiments: A Relativistic Controversy
Roberto Lalli

Energy Controversy
Katalin Martinás

Controversies in Thermodynamics
László Ropolyi

T39 History of Cognitive Science
Room: C4

Tuesday, 28 July, 11.30 – 13.30
Chair: Lillia Gurova

Interdisciplinary Issues in Early Cybernetics
Leone Montagnini

On the Criterion for Deciding whether Machines Can Think
Stefan Riegelnik

History of Humanoid Robots
Basak Yuksel, Yoshihiko Nakamura
Anthropomorphism as a Demarcation Criterion in the History of the Hungarian Cognitive Dog-ethology
Katalin Mund

Prehistory of Cognitive Science
Andrew Brook

Tuesday, 28 July, 15.00 – 17.00
Chair: Csaba Pléh

- Behaviourism and Cognitivism - On the Roots of Cognitive Sciences
  Gabriele M. Mras
- From Today's Crisis in Cognitive Science to Yesterday's Crisis in Psychology
  Nicole Rossmanith, Andreas Reichelt
- Models of the Mind throughout the History of Cognitive Science
  Sven Walter
- Thirty Years Cognitive Studies of Categorization: What’s behind the Reported Progress
  Lilia Gurova

Tuesday, 28 July, 17.30 – 19.30
Chair: Nicole Rossmanith

- Animal Memory and the Origins of Mind: The Conception of Lajos Kardos, a Hungarian Comparative Psychologist
  Csaba Pléh
- Cognitive Science between Biology and the Social Sciences Abstraction, Isolation, Re-opening
  Andreas F. Reichelt, Nicole Rossmanith
- Then and Now: Cognitive Science and Economics
  Filomena De Sousa
- The Right Hemisphere of Cognitive Science
  Bálint Forgács

T40 Pioneering Ideas and Methods in the History of Earth Sciences
Room: C1

Saturday, 1 August, 15.00 – 17.00
Chair: Miklós Kázmér

- History of the Geonomical Concept and the Hungarian School of Geonomy in the Second Half of XX. Century
  Terézia Póka
- Giuseppe Folgheraiter the Italian Pionier of Archaeomagnetism
  Claudia Principe, Jonas Malfatti, Yves Gallet, Maxime Le Goff, Agnes Genevey
- Relevant Cartographical Maps Made and Used by Geographers in the Carpathian-Danubian-Pontic Area, in the 17-20th Centuries
  Horia Salca, Doina Suteu
T41 Some Methodological Aspects of History of Science
Room: A13
Friday, 31 August, 17.30 – 19.30
Chair: Roberto Angeloni

Why does the Traditional Distinction between Internal and External History not Hold?
Roberto Angeloni

Principles of Determination of Discovery Convention Priorities
Aleksandr Pilipenko

Methodological Issues of the History of Soviet Psychology between the Two World Wars: Case Study of Vygotsky Circle
Anton Yasnitsky
Special Meetings during ICHST 2009
(as of 14 July)

Business Meeting of CBD (Commission on Bibliography and Documentation)
Tuesday, 28 July, 17.30 – 18.30, Room: A6

Pioneer’s Roundtable
Tuesday, 28 July, 18.30 – 19.30, Room: D1

IASCUD Commission Meeting
Wednesday, 29 July, 09.00 – 11.00, Room: C4

Commission for History of Ancient Medieval Astronomy CHAMA
Wednesday, 29 July, 09.00 – 11.00, Room: C7

ESHS Meeting
Wednesday, 29 July, 13.30 – 15.00, Room: A9

Meeting of editors and journals
Wednesday, 29 July, 15.00 – 17.00, Room: C7

IUHPS/DHST Council Meeting I.
Wednesday, 29 July, 17.30 – 19.30, Room: C6

IUHPS/DHST General Assembly I.
Thursday, 30 July, 09.00 – 13.00, Room: C7

IUHPS/DHS Modern Commission for the History of Modern Physics
Thursday, 30 July, 15.00 – 16.00, Room: A6

Sciences et Empire Commission ICHST/UNESCO
Thursday, 30 July, 15.00 – 16.00, Room: A7

Commission on History of Science and Technology in Islamic Societies
Thursday, 30 July, 15.00 – 17.00, Room: A4

Meeting of the Commission on History of Geography
Thursday, 30 July, 15.00 – 17.00, Room: A5

Business Meeting of Pacific Circle
Thursday, 30 July, 15.00 – 17.00, Room: A3

Women in Science Commission
Thursday, 30 July, 15.00 – 17.00, Room: A13

East Asian Commission
Thursday, 30 July, 17.30 – 19.30, Room: A6

When is a Problem Solved? Round Table Phil Davis Essay
Thursday, 30 July, 17.30 – 19.30, Room: A5

Joint Commission
Thursday, 30 July, 18.30 – 19.30, Room: A3

Teaching Commission
Thursday, 30 July, 18.30 – 19.30, Room: A13

Meeting of ICOHTEC Executive Board
Thursday, 30 July, 20.00 – 22.00, Room: D1
Field Trips

On July, 30 morning special visits will be organized to places of interest (history, science and culture). The shuttle buses will start at 9.30, meeting point in the registration area.

FT1 – Hungarian Museum for Science, Technology and Transport, Central Building

The predecessor of the Central Unit was the Transport Museum, founded in 1896. The collections and exhibitions almost all are related to transportation history. The main units are: Transport on water: maritime and river and railway transportation. Safety and signaling equipment. There exists an independent aviation collection, space research collection and lifestyle collection. We find here more than 200 original objects: coaches, carriages, trams, wagons, airplanes, gliders, space capsules. These objects can be seen in the main building. World famous is the collection of 1- to 5- scale models of locomotives and wagons.

The Kossuth Historic Boat is open to the public. The Coach Museum in Parád is very popular. Near the central building there is Petőfi Hall with the airplane collection and the space research exhibition.

The tour starts with a 20-minute stop at the Budapest Evangelic Secondary School where several of the Nobel-Laureates of Hungarian origin studied.

FT2 – Hungarian Museum for Science, Technology and Transport, Study Stores

The predecessor of the Study-stores, the Hungarian Museum for Science and Technology was founded in 1954 as Group for Registering and Collecting of Technical Relics. The sphere of collecting comprises all the branches of science (except life sciences), and all the branches of technology (except transportation).

The main scientific collections are:
Objects related to mathematics, informatics, and physics are displayed in the study stores. Objects related to chemistry are also shown here. The collections comprises the best set of geodetic instruments in the country and a very good and old collection of astronomy and optics, The collection of office equipment and household are connected to everyday life. A visit to the telecommunication collection makes the tour complete.MOBILEUM the interactive power machine hall is a fascinating part of the Study-stores.
FT3 – Foundry Museum of the Hungarian Museum for Science, Technology and Transport

Foundry Museum preserves the past of a profession in the heart of the capital, in an old foundry shop of Abraham Ganz’s erstwhile world famous railway wheels factory.
The exterior of the Foundry Museum building is a treat for the eyes. Entering, visitors meet a wooden structure workshop of a 19th century’s factory. All the melting furnaces, pouring ladles, mould boxes, revolving cranes preserved as relics, make the impression of getting into an operating iron foundry.
Take a look at our wonderful relics and documents, 19th century’s artistic iron castings, bell show, cast iron lacy spiral stairs, and relics of Abraham Ganz and András Mechwart’s lives.

FT4 – Electrotechnical Museum of the Hungarian Museum for Science, Technology and Transport

The museum opened its doors in 1982, and houses exhibitions featuring more than a century’s worth of Hungarian contributions to the electric power industry. Electric trains, lighting technologies, and transformer production are on display along with various consumer technologies and a host of other original artifacts.

FT5 – Hungarian Natural History Museum

The Hungarian Natural History Museum is one of the finest institutions of its kind in Europe, an inspirational setting that houses magnificent collections of major historical importance. To promote public understanding and nature conservation the museum collects, classifies, and preserves a wealth of natural artifacts, presenting them according to the latest scientific knowledge.

FT6 – Hungarian Geographical Museum

The Hungarian Geographical Museum presents the heritage of great geographers. Historic documentation from research conducted by Hungarian geographers and geologists, as well as the artefacts from their exotic travels, are displayed in the exhibition.
The Museum presents the heritage of great geographers such as Jenő Cholnoky, Gyula Germanus, Sándor Láng, Lajos Lőczy, János Tulogi, and, last but not least, of its founder Dénes Balázs. Lőczy’s leather boat used for his research on Lake Balaton, as well as the artefacts from Cholnoky’s travels in China and objects from Papua New-Guinea, East Africa, and North and South America are all among the exhibits.
Permanent exhibitions: the role of Hungarians in the scientific discovery of Earth from the 13th century to the present day; scientific exploration in the Carpathian Basin - the results of the leading figures in earth sciences, geography, geology, palaeontology and cartography in the natural scientific discovery of Hungary. The pantheon of the Hungarian world-travelling geographers can be seen in the Museum Gardens.
Built around 1840, the Classicist Wimpffen Mansion is home to the Museum. Temporary exhibitions are also arranged in the Museum which has a public library.

FT7 – Geological Institute of Hungary

The Geological Institute – housed in a purpose-built, spectacular Art Nouveau palace – has been responsible for the geological mapping of Hungary since 1869. This activity is served by a museum of fossils and minerals, a major library of books and maps, and an archive. Exhibitions display old maps, geologists’ instruments and books on the Carpathians from the last 400 years.
**FT8 – Eötvös Loránd Geophysical Institute of Hungary**

The Eötvös Memorial Collection displays the most sensitive gravity instrument of all times, a torsion pendulum, built in 1891 by Eötvös, professor of physics in Budapest. Applied in oil exploration for decades, their ‘evolution’ is illustrated by original instruments. Personal memorabilia of the professor, the politician, and mountaineer Eötvös are on display. Hungarian-made geophysical devices are exhibited from the 1930s onwards.

**FT9 – Museum of Natural History of the Loránd Eötvös University of Sciences**

The roots of the Eötvös Museum of Natural History go back to the first University Natural History Museum, open to the public in Pest already in the end of the 18th century. The current structure of the Museum was set up in 2002, when the Faculty of Science moved to the new Danube Riverside Campus (Lágymányos, Budapest). It consists of six collections (mineralogy, petrology, biology, paleontology, mathematics and science history) and two exhibitions. Minerals and rocks are exhibited in the original 19th century Historical Exhibition Hall, transferred to and rebuilt in the new campus, with its atmosphere proudly representing the long tradition of teaching sciences at the Eötvös Loránd University. The Biology and Paleontology Exhibition is hosted by a modern glass pyramid.

The Science History Collection was established to preserve relics of research and science education at the university, historic demonstration models and charts, analytical equipment, personal objects of professors as well as old textbooks and scientific literature.

**FT10 – Semmelweis Museum, Library and Archives of the History of Medicine**

The museum ranges across the history of medicine, pharmacy, and public health, holding a wealth of instruments. The current temporary exhibition focuses on the history of pathology.

**FT11 – Hungarian Museum for Commerce and Catering**

The museum was founded in 1966, and started its operation in the World Heritage Buda Castle, in the building of the former Fortuna Inn, where it was in operation until 2005. In September, 2006, the museum opened its gates at a new location in District V, next to the Szent István bazilika.

Initially the collection of the museum contained only catering-industry relics, which was later extended with a collection of trade history relics. The institution has the functions of an industry history museum, and meets the requirements of specialized-museology.

**Book Exhibition**


In addition, a bronze model of the Antikythera Mechanism, the oldest known scientific instrument and mechanical universe is exhibited.
Evening Programs (for all registered participants)

Welcome Reception
27 July, Monday, 19.00 – 21.00

The Welcome Reception will be held from 19.00 in the Main Hall of the University (the Congress venue).

Galileo meets Kepler: Motion on Earth and in the Heavens
29 July, Wednesday, 19.30, Room: C7

Authors:
Art Stinner in collaboration with Juergen Teichmann.

Personae Dramatis:
Galileo Galilei (Scientist and Astronomer) – Peter Heering
Johannes Kepler (Emperial Mathematician and Astronomer) – Juergen Teichmann
Cardinal Robert Bellarmine (Master of Controversial Questions) – Gábor Zemplén

In the spring of 1611, Galileo came to Rome to “exhibit the new discoveries and to explain their great consequences”. Clearly he was referring to the recent discoveries he made about motion and especially the celestial observations of 1609 with his new optical instrument. While in Rome, Galileo also had an audience with Cardinal Bellarmine, a Jesuit and an admirer of Galileo. In the play, Galileo succeeds to arrange a meeting with the Cardinal and Johannes Kepler, who was persuaded to come to Italy for this auspicious occasion. The Cardinal first declines but he is curious to meet the great Kepler and discuss motion on Earth and in the Heavens with the two acknowledged masters of terrestrial and celestial motion. The play is about this fictitious meeting but the discussion is based on the extensive correspondence between Galileo and Kepler and between Galileo and Cardinal Bellarmine.

Organ Concert
30 July, Thursday, 20.00 – 21.00

The organ concert organized exclusively for the participants of the ICHST 2009 Congress will take place at St Stephen’s Basilica. The concert of Istvan Koloss organist, who was honoured with the Pro Arte Assisi award and the Knight's Cross of the Hungarian Republic in 1982, will surely remain an unforgettable experience for all.

Program:
- Old Hungarian Music from the XVII Century
  - János Wohlmuth: Musette
  - J.S. Bach: Toccata, Adagio and Fuga C-major
  - T. Albinoni: Adagio
  - F. Liszt: St. Stanislas-Fantasy
  - D. Antalffy: Scherzo
  - L. Boellmann: Suite Gotique
Optional Evening Programs

Dinner on the Boat “Europá”
28 July, Tuesday, 20.00 – 22.00
address: 1011 Budapest, Szilágyi Dezső tér
price: EUR 60

During the cruise on the River Danube you can enjoy magnificent views of historical Budapest and catch a glimpse of Margaret Island, the Parliament, the Hotel Gellért, the Liberation Monument, the graceful bridges and a number of stunning buildings of Budapest. Besides, you may taste traditional Hungarian and special international meals and drinks.

Congress Dinner
1 August, Saturday, 20.00 – 22.00
address: 1146 Budapest, Dózsa György út 41.
price: EUR 50

The Congress Dinner will be held in the Museum of Fine Arts. It contains one of the best collections in Central Europe, offering visitors a taste of the glories of the past, alongside the splendors of the present.

Optional Tours

Limited number of tickets is available at the Registration Desk.
Meeting point in the registration area.
All tickets are placed in the envelope, which was provided upon registration.
The expected time of return of the full-day tours is 17.30 to the Congress Venue.

Budapest sight-seeing (half-day)
28 July, afternoon (14.00) or 2 August, morning (09.00)
price: EUR 30

You may have an overall view of Budapest, one of the most exciting metropolises of the world with a gorgeous geographic location, full of historical monuments and places of interest during the bus trip.

The Puszta (full-day, lunch included)
29 July, morning (09.00)
price: EUR 80

The tour takes you on a scenic drive through the Great Plains to Kecskemét where you will have a guided walk through the town. Kecskemét is the largest town in the region, with historical monuments, nature reserves and a thriving cultural life.
On the way to Vargatanya, you will be greeted with a traditional welcome drink. During the horse carriage riding you will discover the true Hungarian natural phenomenon „Puszta” and visit a true Hungarian farmer country house. In the framework of a spectacular horse show the horse-herder’s tradition will be presented. You'll then enjoy a Hungarian three-course meal with wine at a regular tavern, accompanied with stirring gypsy music.
The Danube Bend / Dunakanyar (full-day, lunch included)
30 July, morning (09.00)
price: EUR 80

Three small old towns crown the picturesque Danube Bend: Szentendre - a unique artists' town, Visegrád - a former royal seat, Esztergom - the former capital of Hungary.

Eger Wine Tour - City and Cellars (full-day, lunch included)
31 July, morning (09.00)
price: EUR 80

With its 175 listed historical monuments, wine-making traditions, Eger, in the north of Hungary, is one of the most popular tourist attractions of the country. After visiting the cultural and architectural sites, it is a great pleasure to venture out to the wine cellars in Szépasszony Valley, west of the town.

Lake Balaton (full-day, lunch included)
1 August, morning (09.00)
price: EUR 80

Lake Balaton, the largest lake in Central Europe, is known as "The Hungarian Sea". Before tasting the famous Hungarian wines of the region, it is well worth visiting the historical sites, the magnificent Tihany peninsula and other places of interest.

General Information

Congress Venue
Budapest University of Technology and Economics (BME), Building K
Address: H-1111 Budapest, Műegyetem rkp. 3-9.

Registration Desk
The registration desk operates in the Aula of Building K.
On-site payments may be settled in cash (EUR or HUF) only. "In-house" ATMs are available in the university building.

Opening hours:
Monday, 27 July: 16.00 – 18.30
Tuesday, 28 July: 07.30 – 18.00
Wednesday, 29 July: 08.00 – 18.00
Thursday, 30 July: 08.00 – 18.00
Friday, 31 July: 08.00 – 18.00
Saturday, 1 August: 08.00 – 18.00
Sunday, 2 August: 09.00 – 13.00

Lunches
The self-service canteen of the university is open daily from 13.00 to 15.00 from 28 July to 1 August. (See the map on the back cover of the Program booklet.)

You can find the menu of the canteen, and the list and map of the nearby restaurants in your Congress bag.
Badges

Please, make sure that you wear your badge at every event you participate in, including coffee breaks and the social events.

Credit Cards, ATM

International credit cards (EC/MC, Visa) are accepted at most hotels, restaurants and shops. ATMs are available in the university building and in many locations nearby and throughout the city.

Speakers’ Instruction

The lecture rooms are equipped with a beamer and a laptop. Presenters are requested to upload their presentations to the room laptop if possible by using a USB stick. Laptops are equipped with Windows XP Professional, Powerpoint, Adobe Reader, Windows Media Player and VLC Video Player. Technical assistance will be provided in the meeting rooms.

Internet Access

Computers with Internet access and WiFi are available from 28 July during the congress hours in the Internet Room on Level D.

Public Transport

Public transportation (BKV) is extensive and reliable. Tickets - valid for one ride only - should be purchased in advance (e.g. at metro stations, hotels, news-stands, tobacco shops), since drivers do not sell any. The tickets should be validated (on board or at the entrance gates), and kept, since one must produce them if requested by inspectors on board or at the exit gates.

You may consider buying a carnet of 10 tickets or a pass (for 1/7/14 days or for a month), or a Budapest Card, instead of single tickets. The junction of all the three metro lines is Déák tér. Service time is between 4:30 a.m. and 11.00 p.m. Most bus and tramlines operate until 11pm.

Taxi

The most popular and reliable companies in Budapest are: City Taxi, 6x6 Taxi, Buda-Taxi, Főtaxi, Rádiótaxi, Taxi 2000 and Tele5 Taxi, and between the airport and the city, the Zona Taxi Service.

Personal Insurance

The Organizers of the Congress do not provide insurance and do not take responsibility for any loss, accident or illness that might occur during the Congress or in the course of travel to or from the meeting site.

Medical Center on Duty at the University

In minor emergency cases examination and medical attendance will be provided during the congress hours by an English speaking physician on duty, free of charge. Important notice: Congress participants are requested to make sure with their health insurance provider to have health insurance coverage valid for Hungary.

Useful Telephone Numbers

(can be dialed without using a card or coins)

Ambulance: 104         Fire Brigade: 107
Police: 105             Overall Emergency: 112
Special Acknowledgement

Federation of Technical and Scientific Societies

Hungarian Academy of Sciences

Hungarian National Commission for UNESCO

Hungarian Patent Office

National Office for Research and Technology