THE ANTIKYTHERA MECHANISM IN BARCELONA

In November 2010, in the frame of the 4th International Conference of the European Society for the History of Science, HPDST organized an exhibition on the Antikythera Mechanism at the Institut d’Estudis Catalans in Barcelona.

The exhibition was organized around eight questions about the Mechanism:
What is the Antikythera Mechanism?
Why is an astronomical and calendrical computer?
Why the Mechanism is an astronomical calculating machine?
Who studied the Mechanism and why new investigations were needed?
What is displayed on the Mechanism?
How does it work?
Is the Mechanism unique?
Where, when and by who?
Two films were presented and also a model of the Mechanism.

The exhibition was inaugurated by the Director of the Institute for Neoellenic Research of the National Hellenic Research Foundation, Prof. Paschalis Kitromilides.

The exhibition was founded by the Hephaestus project (RegPot1-2008, FP 7).

GEOMETRY IN ART AND SCIENCE
Circinus
The 2nd Hephaestus Exhibition

The exhibition “Circinus: Geometry in Art and Science” displays historic drawing and measurement instruments from the private collection of architect Thanasis Koutrouvelis. The exhibits cover a period ranging from the Greco-Roman antiquity to the middle of the 19th century. The main theme is the relation between history of technology and history of art, focusing on Geometry and highlighting its role in all stages of creative drawing. Within this context the instruments on display are presented as the practical, or rather applied side of mathematical theory, and the visitor toured through drawing techniques, artistic models, and ways of thinking in classical architecture and other disciplines.

The seemingly simple compass is the embodiment in brass of the basic principles of geometry, the principles which may be found in the equally simple propositions attributed to Thales, and in Euclidean Geometry, the foundation of all later developments in mathematics. In the Greek antiquity, abstract mathematics, philosophy, cosmology and myth were interrelated. Through the ages those relations evolved and while some were strengthened, others were abandoned. The exhibition presents some examples of these evolutions, but also the scientific instruments as “instruments of the imagination”. This somewhat allusive phrase covers the theme of the exhibition. If scientific instruments are a reflection of the technological advancements of a given period, and are manufactured with the requirements of contemporary drawing techniques in mind, they also help to shape the framework of within which each work of art can be created. From instruments as tools, for the use and needs of each designer, they become instruments of the imagination: they participate in artistic expression, shaping it “sculpting” the style with which each artist creates. By drawing with ruler, compass, protractor, the contact with Geometry, with mathematical symbolisms and their polyeomy becomes almost physical. Rather than as witnesses of the history of technology or history of architecture, this exhibition presents the instruments as the “go betweens” from pure geometry to art and science, as instruments of the imagination which shape and are shaped by the developments, needs and ideals of the worlds that they unite.

The exhibition is co-organized by the National Hellenic Research Foundation, the Museum of the History of Science of the University of Oxford, and the Foundation of the Hellenic World, all of which are participating by sending support material in the form of film, documentaries and interactive computer programs, and curated by Dr Catherine Karela, postdoctoral researcher at the NHRF/INE. Among the series of public events organized to accompany the exhibition there have been documentaries on mathematics in the antiquity, produced by the BBC and by the Hellenic World Foundation, as well as lectures by invited speakers, such as Prof. Theodosios Tassios, Dr Stephen Johnston, Prof. Christina Phili, Prof. Eftychis Papadopetrakis, Mr Thanasis Koutrouvelis, the sculptor Costas Varotos and Dr Efthymios Nicolaidis.

Characteristic examples of the display and key pieces of the collection are presented in the catalogue of the exhibition, accompanied by illustrations and commentary from the organizers.

The exhibition catalogue is an illustrated 20-page booklet presenting characteristic examples of the display and key pieces of the collection. Descriptions of some of the most important, controversial, or typical items are included, as are timetables and explicative panels.

Amongst the commentaries included there is the curator’s presentation, a note from the collector, the whole being introduced by Prof Tassios.
**ALMAGEST II**

The second issue of the journal Almagest, which was published in early December 2010, contains a special section dedicated to Science and Technology in the Ottoman Empire and the Balkans, a section with independent contributions and, for the first time, a section dedicated to book reviews, which from now on will appear regularly on the even issues of the publication.

The special section on Science and Technology in the Ottoman Empire and the Balkans grew out of the symposium Ideas and Instruments in the Social Context of the Ottoman Empire and National States, which was held during the Budapest International Congress of History of Science and Technology in 28 July-2 August 2009, and was organized jointly by Turkish and Greek scholars. Forwarded by Ekmeleddin Ihsanoglu, Former President of the International Union of the History and Philosophy of Science, Division of History of Science and Technology and current Secretary General of the Organisation of the Islamic Conference, the special section covers a period spanning from the Neolithic times, with Atila Bir’s and Mustafa Kaçar’s “Evolution, Functioning and Capacity of the Mediterranean Windmills”, to the late 19th century, with Sevtap Kadioglu’s “Semseddin Sami’s Treatise of Astronomy “Gök” (Sky)” and even early 20th century, with Kyriakos Kyriakou’s and Constantine Skordkoulis’s “The Reception of Ernest Haeckel’s Ideas in Greece”.

More important, however, is one of the—if not the—main themes underlying the papers of this section, namely the cross fertilization of the Byzantine scientific and technological tradition and the respective Ottoman and Western traditions. This theme is highlighted not only in the aforementioned articles, but also in Salim Ayduz’s “The Ottoman Royal Cannon Foundry” and in Tucany Zorlu’s “Tracing Technology through Terminology”.

In the section titled “Varia” appear Huang Huang’s and Ying Qin’s “A new perspective on ancient technique communication of cosmetics between the east and the west, based on the analysis of Chinese cosmetics—“Hu” powder”, Catherine Karela’s work “Hilbert on different notions of completeness: a conceptual and historical analysis”, and Raffaele Pisano’s “On Principles of Sadi Carnot’s Thermodynamics (1824). Epistemological Reflections”.

Finally, the second issue of Almagest hosts a series of reviews of books on history of science and technology. In this issue, the books reviewed cover geographically not only Eastern and Southeastern Europe, with Aleksandar Perovic’s and Eduard I. Kolchinsky’s A distant Accord—Russian-Serbian Links in the Fields of Science, Humanities and Education: the 19th—the first half of the 20th Century and with Yiannis Antoniou’s The Greek engineers: Institutions and ideas 1900-1940, but also western Europe too, with Robert Fox’s and Bernard Joly’s Échanges franco-britannique enter savants depuis le XVIe siècle. Almagest aspires to publish book reviews on the November (even) issue every year, and although the aim of these reviews will be to present and promote the work of scholars from the Southeastern Europe and eastern Mediterranean region, the works of other historians that cover other geographic regions will not be ignored.

**HEPHAESTUS IN PHILOSOPHY OF SCIENCE WORKSHOPS**

*Understanding and the Aims of Science Workshop, Lorentz Centre, Leiden, Netherlands, 31 May–4 June, 2010*

Antigone M. Nounou participated in the workshop Understanding and the Aims of Science, which was held at the Lorentz Centre, an international centre for workshops in the sciences. The Lorentz Centre is located in Leiden, the Netherlands, and the workshop took place between 31 May and 4 June 2010. The workshop was organized by Henk W. de Regt, form the Free University of Amsterdam, and James McAllister, from the University of Leiden, and the themes discussed in the five days of collaborative work, discussions and interactions. The Lorentz Centre is located in Leiden, the Netherlands, and the workshop took place between 31 May and 4 June 2010. The workshop was organized by Henk W. de Regt, form the Free University of Amsterdam, and James McAllister, from the University of Leiden, and the themes discussed in the five days of
its duration included the aims of science and the place of understanding, mechanism-based approaches, unification—and reduction—based approaches, simulations and the provision of understanding, and understanding, imagination and visualization. Antigone presented a paper she has co-authored with F.A. Muller, of the University of Utrecht, in which they argue that one ought to distinguish between Understanding with Explanation and Understanding without Explanation, and that the latter is a notion worth exploring and analyzing philosophically. What distinguishes their ideas from other ideas propounding the independence of understanding from explanation is that they believe it is possible to explicate a notion of understanding that does not appeal to explanation at all; not even in order to identify through explanation those elements that are associated with understanding.

The duration of such a workshop, five whole days, is long enough to allow not only for extensive discussions and essential exchange of ideas, but also for consolidation of the new insights gained. Hence it should come as no surprise that a lot of things were clarified during the workshop and that new directions seem to have opened, including the exploration of the idea of scientific understanding without explanation. Finally, a special acknowledgment is in place of the very generous hospitality of the Lorentz Centre and the additional funding the organizers got from the University of Leiden and from the Netherlands Organization for Scientific Research (Physical Sciences), which allowed, among other things, a wonderful dinner on a cruising boat, which cruised us on the scenic canals and lakes around Leiden, in what turned out to be a very sunny and warm summer evening.

Structuralism in Philosophy of Science Workshop
University of Notre Dame, 18-20 November, 2010

Antigone M. Nounou participated in the workshop Structuralism in Philosophy of Science, which was held at the Philosophy Department of the University of Notre Dame, between the 18th and the 20th of November, 2010. The workshop was organized by Katherin Brading, associate professor of philosophy at the University of Notre Dame, and its purpose was to help Stephen French, professor of philosophy at the University of Leeds, in the process of writing a book on structural realism. Hence, the participants, who had come to Indiana from the UK, Germany and Greece, but also from California, Pennsylvania, Michigan and Florida, discussed issues that they thought a structural realist should address so that their position becomes more lucid and coherent. In her paper “Kinds of Objects and Varieties of Properties” Antigone pointed out that a structuralist—whether of realist disposition or not—ought to clarify what it takes for a property to be characterized as structural, and drawing from modern physics she offered a series of definitions that distinguish between different varieties of properties, from intrinsic, to relational, to structural. The programme of the workshop allowed plenty of time for discussions not only during the sessions but also during the coffee breaks and during the lunch and dinner breaks. It is worth mentioning the gracious and generous hospitality of Katherine Brading and the University of Notre Dame, who provided for all.

STUDIES IN OTTOMAN SCIENCE

A special issue: Asuman Baytop Festschrift
Department of the History of Science, Istanbul University
Vol. XI, Nr.1-2, 2009 / 2010

The volume XI, 1-2, 2009-10 of the Osmanlı Bilimi Araştırmaları (Studies in Ottoman Science) is dedicated to Professor Dr.sc.nat., Dr.h.c. Asuman Baytop in recognition of her oeuvre in the history of botany, on the occasion of her 90th birthday.

Born in 1920 in Istanbul, Asuman Baytop graduated from the Istanbul University, Faculty of Science, School of Pharmacy, in 1943. The same year, she joined the staff of the Chair of Pharmacobotany and Genetics of the Faculty of Science, and worked there until 1946 as assistant to Professor Dr. Alfred Heilbronn. She started to work on her doctoral thesis with Professor Dr. Hans Flück in 1947 in the Pharmaceutical Institute of the Eidgenössische Technische Hochschule (Zürich). After receiving her degree, she returned to Turkey and pursued her academic career in Istanbul University. In 1964, she was appointed director to the newly founded Department of Pharmaceutical Botany in the Faculty of Pharmacy. As professor emerita
A. Baytop’s early researches are on pharmacognosy. She prepared an anatomical atlas to help identifying herbal drugs. During her Anatolian excursions, she collected specimens of Turkish medicinal and useful plants, and others. The specimens that she identified, constituted the very basis of the herbarium she created at the Faculty of Pharmacy of Istanbul University. She collected heavily from European Turkey and added new species to its flora. Some of these species were also new for Turkey. Her work on the flora of European Turkey was rewarded with a medal of honor in 1978 at the IInd International Symposium on the Problems of Balkan Flora and Vegetation.

Her collecting in Anatolia, allowed her to discover some species new for Turkey and for science. Her research mostly focused families having medicinal and useful properties such as Solanaceae, Apocynaceae, Papaveraceae and Gramineae. She contributed as an author to P. H. Davis' Flora of Turkey and the East Aegean Islands. The VIIIth volume of the Flora of Turkey was dedicated to Asuman Baytop and Turhan Baytop in recognition of their extensive studies on Turkish flora over many years. Her floristic work and her services in founding and enriching the herbarium of the Faculty of Pharmacy were rewarded with Service Award of TÜBİTAK (The Scientific and Technological Research Council of Turkey) in 1999.

Her original collection is housed in the Herbarium of the Faculty of Pharmacy of Istanbul University (ISTE) and counts 23,300 specimens. The Flora of Turkey (1965-2000) cites 1876 specimens collected by herself. She is the collector of 13 type specimens, two of which are from Turkey-in-Europe. An equally important aim of her travels was the recording of plants’ vernacular names.

Besides her own floristic researches, she taught pharmaceutical botany in the Faculty of Pharmacy in Istanbul, conducted doctoral thesis on Turkish flora, published textbooks, laboratory manuals, the catalogue of the Herbarium and research articles. Between 1965-1989, she acted first as a member, then head of the editorial board of the Journal of the Faculty of Pharmacy of Istanbul University.

A. Baytop became particularly interested in the history of botany after her retirement in 1987. During the last 20 years, she published more than 50 research articles on the history of botany in Turkey. Collectors who contributed to the Turkish flora, books that were compiled for the teaching of botany in Turkey, botanical researches at Istanbul University starting from 1933, were her major topics. For this purpose, she examined the travel books of Europeans who visited the Ottoman Empire from the 16th century on, the collections and publications of many collectors. She wrote the biographies of relevant collectors, as well as the 1964–98 history of the Department of Pharmaceutical Botany (Istanbul University, Faculty of Pharmacy), which she had administered between the years 1964 to 1987.

Most of her research articles on the history of botany were published in the Osmanlı Bilimi Araştırmaları (Studies in Ottoman Science), the journal she diligently contributed as a member of the referees’ board. Her collected articles were published in 2003 in a volume entitled Türkiye’de Botanik Tarihi Araştırmaları (Studies on the History of Botany in Turkey). A second enlarged edition came out in 2004.

Asuman Baytop’s profound knowledge in botany, her researches on Turkish flora over many years, and her interest in the history of botany shed new light to the history of floristic researches and the individual collectors, as well as to the history of botany education in Turkey.

Contents: Asuman Baytop’s biography, botanical excursions and plant collection (Feza Günergun); Şehremini Central Pharmacy’s Book of Prescriptions (Ekrem Sezik); The organisation and administration of the Ottoman court pharmacy in the second half of the 19th century (Arzu Terzi); La Flore de Turquie: Au sujet de quelques traditions, rites et croyances (Michèle Nicolas); The genus Gouinia (Poaceae)
and Dr. François-Marie-Gabriel Guoin (Şeref Etker); The Bunsen burner, the birth of spectral analysis and their introduction to Turkey (Emre Dölen); The first geology book published by the Ottomans and what it teaches on the state of geology in the Ottoman Empire (Celal Şengör); The history of dentistry education in Turkey (1908-1933) (Ali Baltacıoğlu – İsmail Hakki Baltacıoğlu); Memories of Istanbul University: Those I know and I remember (Gülsen Koptagel-llal); Medicine chests of the Ottoman navy; Notes for the early nineteenth century (Feza Günergun); A Milestone in Ottoman Pharmacy: The British Pharmacy in Istanbul (Halil Tekiner); Apothecaries and healers in Ottoman history of pharmacy (Nuran Yıldırım); Opium in the Ottoman Empire: Historical Notes (Affe Mat); Regulations on the licensing of pharmacies, the qualification of pharmacists, and the relationships between pharmacists and physicians in Turkey (1852-1953) (Nuran Yıldırım – Gürkan Sert); Botany books for forestry and agriculture schools in Turkey, by Migirdiç Hekimyan, 1880 and Apraham Allahverdi (Hûdaverdi), 1911-1913 (Şeref Etker); The Anatolian plant collection of Hikmet Birand (1904-1972) (Asuman Baytop); Hüsnü Demiriz (1920-1999) and his Turkish plant collection (Asuman Baytop); The Natural History Collection of the Imperial Medical School, Istanbul, in the early 1870s (Transkl. From Abdullah K. Hammerschmidt by Feza Günergun); M.H. van den Boogert, Aleppo Observed: Ottoman Syria Through the Eyes of Two Scottish Doctors, Alexander and Patrick Russell (Bookreview by Şeref Etker); Index of Osmanlı Bilimi Araştırmaları (Studies in Ottoman Science) vol. I-X (1995-2010).

SCIENCE BETWEEN EUROPE AND ASIA


This book explores the various historical and cultural aspects of scientific, medical and technical exchanges that occurred between central Europe and Asia. A number of papers investigate the printing, gunpowder, guncasting, shipbuilding, metallurgical and drilling technologies while others deal with mapping techniques, the adoption of written calculation and mechanical clocks as well as the use of medical techniques such as pulse taking and electrotherapy. While human mobility played a significant role in the exchange of knowledge, translating European books into local languages helped the introduction of new knowledge in mathematical, physical and natural sciences from central Europe to its periphery and to the Middle East and Asian cultures. The book argues that the process of transmission of knowledge whether theoretical or practical was not a simple and one-way process from the donor to the receiver as it is often admitted, but a multi-dimensional and complex cultural process of selection and transformation. The book explores the issue from a different geopolitical perspective, focusing on regions that are both recipients and distributors and provides new perspectives based on newly investigated material for historical studies on the cross scientific exchanges between different parts of the world.

Contents: Introduction (Feza Günergun, Dhruv Raina); Reflections on the transmission and transformation of technologies: Agriculture, printing and gunpowder between East and West (Christopher Cullen); The Ottoman Empire and the technological dialogue between Europe and Asia: the case of military technology and knowledge in the gunpowder age (Gabor Agoston); General observations on the Ottoman military industry, 1774-1839: Problems of organization and standardization (Kahraman Şakul); Cultural attitudes and horse technologies: a view on chariots and stirrups from the eastern end of the Eurasian continent (Nanny Kim); Patchwork - the norm of mapmaking practices for western Asia in Catholic and Protestant Europe as well as in Istanbul between 1550 and 1750? (Sonja Brentjes); The Ottoman ambassador’s curiosity coffer: Eclipse prediction with De La Hire’s ‘machine’ crafted by Bion of Paris (Feza Günergun); The clockmaker family Meyer and their watch keeping the alla turca time (Atilla Bir, Şinasi Acar, Mustafa Kaçar); The Adoption and adaptation of mechanical clocks in Japan (Takehiko Hashimoto); Adoption and resistance: Zhang Yongjing and ancient Chinese calendrical methods (Pingyi Chu); Travelling Both Ways: The Adaptation of Disciplines, Scientific Textbooks and Institutions (Dhruv
By the mid-20th century in Serbia worked hundreds noteworthy scientists in all mentioned fields. Some of them gained significant place in the contemporary science in general. This primarily refers to Milutin Milankovic (1879 – 1958) and his astronomical theory of climate change, Mileva Marie Einstein (1875-1948), co-author of the theory of relativity, Mihailo Petrovic Alas (1868 – 1943), author of the mathematical phenomenology and the first hydraulic computer capable to solve differential equations, Kosta Stojanovic (1867–1921), author of the first mathematical economics, Nikola Tesla (1856 – 1943), inventor of the AC motor and generator, Michael Pupin (1954 – 1935), the inventor of a new telecommunications technology. In addition to those world-famous scientists, edition analyzes a further 150 other scientists who have largely been recognized and outside Serbia as members of foreign science academies and learned societies.

This comprehensive edition, with extensive bibliographies and chronologies which encompasses more than 5000 pages in 11 volumes, is attainable now in one abridged volume published in English language. It contains brief description of the life and the most important scientific results of 125 Serbian scientists elaborated in the first ten books of this edition. This book provides an opportunity to gain insight into the versatility of Serbian researchers from the 19th until mid-20th century. It is valuable because until now English reader could not find this information in one volume. The book includes a list of scientists according to fields of their work and by years of their birth as well as index of contributors.

Aleksandar Petrović
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HEPHAESTUS IN BARCELONA

From the 18th to the 20th of November, 2010, the 4th International Conference of the European Society for the History of Science took place in Barcelona, Spain. It was jointly organized by the Societat Catalana d’Història de la Ciència i de la Tècnica and by the European Society for the History of Science, and hosted by the University of Barcelona.

The HPDST had a strong presence in the Conference. Members of the team gave five different papers and one plenary lecture. They were also invited to organize an exhibition on the Antikythera Mechanism, which was very successful. More specifically, HPDST members made the following contributions:

Dr. Efthymios Nicolaidis, Director of Research of the Institute for Neohellenic Research of the National Hellenic Research Foundations, was asked to give one of the three Conference Plenary Lectures. Dr. Nicolaidis chose as his subject the relation between Science and the Eastern Orthodox Church during the 17th-19th Centuries. The lecture took place in the beautiful and historical Paranymph of University of Barcelona and Nicolaidis showed how historiographical reflections on the relation between science and religion can be enriched by considering the interactions between the scientific enterprise and the Eastern Orthodox Church. E. Nicolaidis charted the many different factors that first hindered and later facilitated the role of science within Eastern Orthodox philosophical discourse, while presenting case studies rarely studied within a European perspective.

Professor Kostas Skordoulis, another senior researcher of HPDST was a participant in the “Different Historiographies of Science-Their Advantages and Shortcomings” Symposium. He presented a study titled “Epistemological Aspects of the Historiography of Science”, in which he discussed the controversial epistemological aspects of the development of History of Science in Greece as a discipline. Starting from the first Professor of the subject (and one of the first in Europe), Michael Stefanides, he showed the ideologically laden and ambivalent role that History of Science was called to play within Greek intellectual life. His paper culminated in a discussion of the recent rapprochement of History of Science and Science Education and the epistemological challenges posed by their integration.

Dr. Gianna Katsiampoura, researcher at the Institute for Neohellenic Research of the National Hellenic Research Foundation, gave a paper on Astronomy in the late Byzantine Era as a debate between different traditions in the Symposium organized by K. Nikolantonakis (see bellow). Dr. Katsiampoura’s presentation detailed how a number of scholars working in Constantinople from the 13th to the 15th century inaugurated three separate traditions of astronomy, in response to new ideas coming from Persian and Jewish. Thus, in opposition to the prevalent view of Byzantium as at best a storekeeper of classical heritage, Dr. Katsiampoura presents a community engaged in vigorous debates.

Dr. Kostas Tampakis presented his research on science education as a neglected factor
in scientific community emergence in the symposium titled “Cross-National and Comparative History of Science Education”. His work showed how science education played both a formative and an institutional role in two separate national contexts, those of early Modern Greece and 19th century USA. His research was invited to be submitted in a special issue of the journal Science & Education.

Dr. Maria Terdimou gave a paper titled “The Acquisition of Mathematical Knowledge through European Textbooks by the Greek Intellectual Community in the 18th Century” as part of the Symposium on the History of Science and Education All in all, indicative of the vigorous participation of HPDST in ESHS is the fact that the team was chosen to host the next ESHS conference, which will take place in Athens, in 2012. Dr. Efthymios Nicolaides made a special presentation in the full assembly, the result of which was the unanimous decision for HPDST to be the next local organizing institution.

Apart from Hephaestus members, four other Greek historians of science were present in Barcelona, demonstrating the rigor of the Greek historiography of science.

Prof. Konstantinos Nikolantonakis from the University of Western Macedonia organized a Symposium on the “Transmission of Mathematical Sciences among the Mediterranean Culture” and gave the paper “Studies on the Problem of Minimum and Maximum in Conic Sections’s Traditions. Apollonios of Perga and Serenus of Antinoeia”

Prof. Manolis Patiniotis and Prof. Faidra Papanelopoulou from the University of Athens chaired, coordinated and presented papers in the “Centers and Periphery in Europe: The STEP Research Project” and “Representations of Science and Technology in the European Daily Press” Symposia, respectively.

Finally, Dr. Manolis Kartsonakis of the Hellenic Open University participated with a poster on Natural Philosophy and Religion in Byzantium.

Konstantinos Tampakis

THE BOSKOVIC’S YEAR OF 2011
CROATIA

The Boskovic’s year of 2011 in Croatia has been confirmed and proclaimed by the Croatian Parliament (mid of February, 2011) based on the Proposal of the Croatian Government. It has been decided that Croatian Academy of Engineering (HATZ, Zagreb) will be responsible to coordinate all of the 25 interesting events (symposia and various projects, already submitted to the Croatian Ministry of Science, Education and Sports) on the national and international scale, to be held in Croatia in order to celebrate the 3rd centenary of the Boskovich’s birth. A comprehensive promotion of the work and life of R. Boskovic through the whole year in various cities (Zagreb, Dubrovnik, Split, Rijeka, Zadar, Sibenik) will be going on along the Croatian way towards a membership of the EC.

A particular decision was done for the festive national academy to be held at May 18, 2011, in the Vatroslav Lisinski Concert Hall in Zagreb, exactly on the Boskovich’s birth. A scientific programme and scenario of the event will be prepared and executed by the HATZ, Zagreb.

Polymath and philosopher of nature Rudjer Boskovic (1711–1787) was known throughout the history of science and technology as the author of the “Theory of Natural Philosophy”, who has reconciled Newtonian physics and metaphysics of Leibniz’s monadology into the new natural philosophy, based on the original atomism with respect to the Nature’s ultimate building blocks.

A very short entry on R. J. Boškovic had been stolen from the Monastery in Dubrovnik by the second part of the 20th century. However, an international search for a disappeared portrait was recently launched by Lady J. Beresford Peirse (London) who is widely known as an admirer of the Croatian roots, arts and science. Her deep motivation is to include the portrait of Bosckovic in the exhibition planned to be held in London (November, 2011) when the 300th anniversary of the Boskovic will be marked.

Rudjer Josip Bokovic / Rogerius Joseph Bosovich (1711, Dubrovnik – 1787, Milano):

One of the greatest Croatian and World scientists and philosophers of all time, natural philosopher, mathematician, physicist, technician, poet, Jesuit, diplomat. He was universally occupied by the problems of astronomy, optics, mechanics, geodesy, and construction techniques, of his time. His life’s work, A Theory of Natural Philosophy (Vienna 1758 and Venice 1763, respectively), appeared as a new synthesis
which rose up new insights into the ultimate structure of matter and relations in nature, which is to his own formulation “reduced to one single law that exists in nature”. Bošković explains phenomenology and the structure in nature through the mutual interaction of the pointlike atoms, impenetrable and indivisible building points as the origin of forces. Depending on their distances in the space, forces between them can attract or repel (curva Boscovichiana), regardless of whether is it regarded an elementary particles or the whole universe in question.

Preliminary Announcement – Call for papers*

The “International Symposium on Rudjer Boskovic and Contemporary Views on Particle Physics”, is to be held in Šibenik as a part of the Celebration of the 300th Anniversary of Boscovich’s Birth in 2011 in Croatia

* Not yet finally confirmed w.r.t. financial funding

Šibenik is a beautiful and historic city that was mentioned as a native Croatian town for the first time in 1066. Located on the Dalmatian coast of Croatia at the mouth of the Krka River facing the Adriatic Sea, it is dominated by a numberless of craggy hills that rise suddenly to rugged mountains. Šibenik’s most international landmark is the Roman Catholic Cathedral of St. Jacob, built between 1431 and 1555, combining Renaissance and Gothic styles of architecture. The Cathedral is included on the UNESCO World Heritage List since 2000 as the magnificent monument both of the outside and inside unique architectural and sculptural beauty. A core of the town of Šibenik includes other amazingly historical buildings such as City Hall and Monastery of St. Francis of Assisi, more than 30 churches, and interesting buildings of the modern time such as Theatre and Library. There are four fortresses encompassing city form the land side as well as from the sea, giving evidence to the turbulent times in the long history of Šibenik. A present development of Šibenik is characterized by the crossroad between the seaport and industrial city of the recent times towards the future centre of the elite tourism in the region, based on the internal beauty of nature of the Krka National Park and the Kornati as the densest archipelago in the Mediterranean Sea. This is aimed to be basically enriched by the agriculture production, ecology and new energy resources with related modern technology in addition. A long and deep arts and humanistic traditions in Šibenik prove strongly to be a predestined town to host the international scholars who will interdisciplinary discussed various aspects of the Boskovic’s work and his natural-philosophical thinking interfaced with a contemporary development of particle physics.

Main Theme of the Symposium: Exploring the matter by thinking and modern particle physics experiments: On the occasion of 300th anniversary of Bosovich’s birth

Organizer and Chair: Tomislav Petkovic, professor of physics, Department of Applied Physics, Faculty of Electrical Engineering and Computing, University of Zagreb, Croatia.

Coorganizers: Faculty of Electrical Engineering and Computing (FER) in Conjunction with the Main Library Juraj Sizgoric of the City of Šibenik and Town of Šibenik.

Venue: SIBENIK (City Hall, Library Juraj Sizgoric of the City of Šibenik, Croatian National Theatre Šibenik, Monastery of St. Francis of Assisi in Šibenik, and The St. Jacob’s Cathedral
in Sibenik). Invited speakers and participants will be accommodated at Jadran Hotel and Student’s Hostel in Sibenik.

Time: July 17 – 20, 2011.
Sunday, July 17, 2011: Arrival and accommodation of participants in Sibenik in the afternoon or late evening.

Language: Croatian or English

Thematic Issues:
Assessments of the Boskovic’s Theory of Natural Philosophy in the light of modern experimental particle physics

Boskovic’s first universal Theory for the single force in Nature and a modern dream of the unification of basic forces (theory of everything): epistemological considerations

Boskovic’s ultimate building points (atoms) in nature and elementary quarks in the Standard Model

Boskovic’s natural-philosophical appereceptions versus the new paradigm of the physics with objects and particles in the high energy physics experiments

Boskovic and the ultimate questions on the bridge between modern science and religion

Reception of Boskovic’s work in science, philosophy, and culture in the World

The Boskovic’s legacy in the Croatian science and philosophy

Historical overview: Interpretations of Boskovic’s work and thinking by the great names of science and philosophy (Bohr, Heisenberg, Feynman, Z. Markovic, I. Supek)

Exotics: Attempts claiming beyond of the Boskovic’s thinking, towards the complementary path of physics and philosophy today?

THE GOLDEN PLATE AWARD

The editorial committee congratulates our colleague Prof Petkovic for receiving the prestigious award of the Golden Plate “JosipLončar” by the Faculty of Electrical Engineering and Computing in 2010, for outstanding services to education and research, especially for synergy of humanistic, natural and technical sciences.

Prof. JosipLončar (1891 - 1973) was one of the founders of the Faculty of Electrical Engineering and Computing at the University of Zagreb.

BULGARIAN EPOCH IN GENETIC IMPROVEMENT

Professor Christo Daskalov (1903-1983) – an epoch in tomato genetics and genetic improvement

Prof. Christo Daskalov, member of the Bulgarian Academy of Sciences was born on February, 18, 1903 in a village Vaglenzi, near the capital of the Second Bulgarian Kingdom (1185-1393) Veliko Tarnovo, in the family of teachers. He graduated as agronomist from Halle “Martin Luter” University, Germany. In 1928 he gained a grant for fellowship in plant genetics and breeding provided by the Bulgarian Ministry of Agriculture and joined the group of Prof. Nilsson-Ehle in Sweden and lately that of Prof. Scheibe in Berlin-Dahlem, Germany.

In 1930 he returned in Bulgaria and until 1932 worked as a Director of the Experimental station in Kneja and Head of department at the Experimental station of Sadovo. Prof. Daskalov initiated genetic study on vegetables in 1932 at the Experimental station of vegetables and rice in Plovdiv, now “Maritza Vegetable Crops Research Institute”. In 1946 he became a professor and in 1948 - first rector of the Agricultural University of Plovdiv. In 1948 Prof. Daskalov was elected as corresponding member and in 1952 – as a member of the Bulgarian Academy of Sciences, (BAS). Since 1952 to 1978 he was Director of the Institute of Genetics, BAS. At the same time as a President of the Academy of Agricultural Sciences and lately as Vice-President of BAS he contributed significantly to the development of the biological and agricultural science in Bulgaria.

Prof. Daskalov’s energy and scientific
creativity extended to different vegetable crop plants such as pepper and eggplant, but tomato remained his favoured research object. For about five decades Prof. Daskalov has played a vital role in the development of tomato genetics and breeding in Bulgaria. The results of his investigations have proved to be equally important to theory and practice.

Prof. Daskalov’s scientific interest extended to a wide scope of issues, heterosis and its exploitation in tomato breeding being one of his main research subjects. The idea of exploiting the genetic distance of the parents as an indicator in the pursuit of heterosis in tomato was reported by Daskalov in 1942. He reported that lines developed on the basis of interspecific hybridization were characterized by high combining ability for economically important traits. Based on these findings it was concluded that for acquiring heterosis for early and total yield, the hybrids should include lines of different origins. (selected publications No 2, 3 and 5).

In 1932 Prof. Daskalov developed the first tomato hybrid in Bulgaria and in the world - “Saria x Komet”, (selected publication No 1) at the Agricultural Experimental Station, Plovdiv, where the first quantities of hybrid seed were produced, as well.

The long years of investigating heterosis, its causal factors and application in practice, resulted lately in the development of a number of tomato hybrids such as “No 10 x Bizon”, “Triumph”, “Ogosta”. Since 1949 and up to the late sixties (1960s), for example the number one cultivar for early field production in Bulgaria was the hybrid “No 10 x Bizon”. (In Europe and worldwide tomato hybrids began to take over the market in the early seventies of 20th century and their use increased dramatically throughout the following decades). He is co-author of “Cristy” that was the most widely used tomato hybrid for early and mid early field production in the country during the period 1975-1989, when Bulgaria used to be the most important exporter of the Eastern block countries of tomatoes for the fresh market (the exported quantities being mainly from Bulgarian cultivars) and an important producer of hybrid seeds (3-4 tones per year).

Another important and intriguing problem that Prof. Daskalov approached in his studies was finding ways to facilitate the process of tomato hybrid seed production. To this purpose he and his collaborators concentrated on detailed studies of different types of genic male sterility (selected publication No 5). His collaborators continued these researches after the death of Prof. Daskalov and during the last 20 years it brought about successful use of positional sterile (ps 2) mutant in hybrid breeding. At present about 70% of the Bulgarian hybrids released and widely used in the country possess ps 2- sterile seed parent that significantly increases the efficiency of the process of hybrid seed production.

During the early seventies Prof. Daskalov has encouraged the development of one new field of research - tomato genetics and breeding for high nutritive and market quality. On the basis of interspecific hybridization and mutant genes he and his collaborators succeeded in developing lines and cultivars possessing high dry matter, vitamin C and lycopene content (selected publication No 4).

Prof. Daskalov was a preferred partner in the development of international projects. During long years he was involved in projects with Dutch company Sluis and Groot, with different institutes from the Eastern block countries.

The results of Prof. Daskalov’s investigations are presented in more than 150 papers, book chapters and monographs published in Bulgaria and abroad. His research findings and achievements placed him as indisputable founder of the Bulgarian horticultural science and genetic improvement of tomato, pepper, eggplant, watermelon, bringing him international recognition, one of the proofs being hundreds of citations of his papers. He was elected member of the Academies of Sciences of Poland, Hungary, ex-URSS, ex-East German Agricultural Academy, Honorary Doctor of Humboldt’s University, Berlin and of the University of Horticulture in Budapest.

Among Prof. Daskalov’s many talents was the love and talent for music and he often entertained himself and his colleagues playing the violin.

Prof. Daskalov was a great man in his devotion to science, his humbleness, fascinating combination of realism and creative fantasy, ability and readiness to help young researchers and will be an example for several generations of scientists.

Selected publications
2. Daskalov, Ch. (1942) Ergebnisse aus


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METATHEORIA: A NEW JOURNAL

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Periodicity: twice per year (April-October).

Languages: Spanish, English and Portuguese.

Editorial procedure: double-blind review procedure.

Types of papers: Original papers, Reviews, Translations and Reissues of classical texts

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The journal welcomes submissions via the online portal (http://metatheoria.com.ar/Index.php/m/information/authors) or by e-mail to the Editorial Secretariat (redaccion@metatheoria.com.ar).

UNDERSTANDING LIFE

4th Annual meeting on the Philosophy of Nature,
Department of Philosophy of the University of Patra

The Department of Philosophy of the University of Patras has organized its 4th annual meeting on the Philosophy of Nature. This year’s conference was dedicated to the notions of life and living creature. More precisely, the full title of this year’s conference was: “Understanding life. Philosophical approaches”. This topic has been examined through various perspectives which followed the historical development of the notion of life in the history of philosophy as well as in the history of science. Thus, the papers presented were relevant to the notion of living creature found in philosophy, both ancient and modern. I. Kalogerakos, (University of Athens) presented a paper on the problem of the genesis of living creatures in some of the main texts of Empedocles and Plato. I. Georgoulas,
PhD, presented a paper on the problem of the education of the new born babies in Plato. S. Stavrianeas (University of Patras) treated the question of the definition of the notion of life in Aristotle. E. Vampoulis (University of Patras) presented a paper on the way Spinoza’s philosophy treats the nature of the human body. The conference concluded with a lecture given by C. Flordellis (University of Patras, Faculty of Medicine) who lectured on the evolution of the conception of the subconscious.

OCEANOGRAPHY IN THE AGE OF GLOBALISATION

IX International Congress for the History of Oceanography
“Oceanography in the Age of Globalisation: Historical and Sociological Perspectives”

Dates
12-16 July 2012

Place
Athens, Greece

Sponsoring Institutions
International Union of the History and Philosophy of Science / Division History of Science and Technology / Commission for the History of Oceanography (www.dhstweb.org)
National Hellenic Research Foundation (www.eie.gr), Programme Hephaestus (FP7, Capacities) (www.hpdst.gr)
National and Kapodistrian University of Athens (www.uoa.gr)

Conference Locations
National Hellenic Research Foundation, 48 Vassileos Constantinou Avenue, Athens (Metro station: Evangelismos, Line 3)
University of Athens Main Building or “Propylaia”, Panepistimiou Street, Athens (Metro station: Panepistimio, Line 2)

Registration Fees
Full Participants  160 Euros
Students     50 Euros
Accompanying persons  70 Euros

The Conference proceedings, additional informational material and extensive tourist information on Athens and the surrounding mainland and islands, will be distributed to all participants.

There will also be a welcome breakfast reception on the first day of the conference and a farewell traditional dinner, included in the registration fee.

Proceedings
Abstracts will be published in electronic form.

All participating authors are required to provide the organizers with their full papers (according to the instruction for authors) during the conference.

A selection of these will be published in a special thematic volume after peer review. The papers by the invited speakers will be included without any other procedure.

Special Visits
Day trip to the Hellenic Centre for Marine Research in Anavissos, where one or two sessions of the conference and keynote lectures may take place, and to the Temple of Poseidon on Cape Sounion.

Day trip to Delphi

Accommodation
There is a large number of hotels in Athens. The organizers will try to achieve special prices to certain hotels near the Conference venues for the participants. A list of these hotels will be provided to all interested parties.

For more information and expression of interest please contact:
Dr. George N. Vlahakis, History Philosophy and Didactics of Science and Technology Programme, Institute for Neohellenic Research, National Hellenic Research Foundation (gnvlahakis@mpiwg-berlin.mpg.de and gvlahakis@yahoo.com)
Ass. Prof. Manos Dassenakis, Laboratory of Environmental Chemistry, Department of Chemistry, National and Kapodistrian University of Athens (edasenak@chem.uoa.gr)

CLIMATIC DETERMINISM

International Commission for the History of Meteorology

Climatic Determinism: Then and Now
National Hellenic Research Foundation, Athens 18 – 20 July 2011

Call for papers: Abstracts will be reviewed by the Committee consisting of Georgina Endfield (Nottingham), James R. Fleming (Colby), George N. Vlahakis (Athens) and Vladimir Jankovic (Manchester).

Submission deadline: 1 March 2011. Please send 200 word abstracts and a brief CV to Vladimir Jankovic vladimir.jankovic@manchester.ac.uk Centre for the History of Science, Technology and Medicine, University of Manchester.

Climatic determinism has a very long and checkered history. It has provided an enduring framework for thinking about the relationship between the human and natural environments
by making the climate a demiurge of social universe. In doing so, climatic determinists have put forward a particular species of political ethics whose self-serving claims about the environmental distribution of virtue, value and privilege have long been subject of debate and criticism. Most problematically, the idea of climate as a key force in social development has naturalized existing forms of cultural domination, political hierarchy, economic dependency and racial inequity. While most of such thinking has been discredited, in recent years, the omnipresence of anthropogenic climate change has caused a resurgence of similar ideas, causing scholars and commentators to ask if these represent a revival of climatic determinism and, if so, with what consequences?

Do such views constitute a revival of climatic determinism? How does the role of climate in today’s world compare to its earlier roles in geography, earth sciences and political theory? How can historians and social scientists contribute to the scientific and political discussion of climate crisis?

Our 2-day meeting in Athens encourages historians, philosophers, sociologists, geographers, literary historians, and cultural theorists to reflect and debate about reductionist readings, deterministic explanations and the putative obviousness of the climate crisis in both the academic and the public spheres.

**HEPHAESTUS 2**\(^{ND}** INTERNATIONAL CONFERENCE**

*International Conference on Critical Education*

**12-16 July 2011, Athens, Greece**

**Second Announcement**

Co-organised by the project Hephaestus, the Department of Education of the University of Athens and the Journals of: Critical Education Policy(UK), Cultural Logic (USA/Canada), Kritiki (Greece), Radical Notes (India)

**Conference Organizing Committee**

Coordinators:

- Dave Hill (Middlesex University, UK)
- Peter McLaren (UCLA, USA)
- Kostas Skordoulis(University of Athens, Greece)

**Keynote Speakers:**

- Peter McLaren (UCLA, USA), Amrohini
Sahay (Hofstra University, New York, USA), Dave Hill (Middlesex University, UK), Aristides Baltas (National Technical University of Athens, Greece), Ravi Kumar (Jamia Millia Islamia University, Delhi, India), John Preston (University of East London, England) and also speakers from the Greek education movement: Lazaros Apekis (University Teachers movement against the cuts in education), Chrysooula Papageorgiou (Unemployed and part-time Teachers Union) Confirmed Participants (as on 6th Dec 2010), Fayaz Ahmad (JMI Central University, Delhi, India), Dennis Beach and Anna-Čarin Johnsson (University of Boras, Sweden), Sarah Carpenter and Shahrazad Mojab (Ontario Institute for Studies in Education, University of Toronto, Canada), Namita Chakrabarty (University of East London, England), Domingos Leite Lima Filho (Federal Technological University of Paraná -UTFPR, Brazil), Morgan Gardner (Memorial University, Faculty of Education, Newfoundland and Labrador, Canada), Sara Hauftman (Achva Academic College of Education, Israel), Steven Hales, (University of Toronto, Ontario, Canada), Petar Jandric (Polytechnic Graduate School in Zagreb, Croatia), Nathalia Jaramillo (Purdue University, USA), Anastasia Liasidou (European University of Cyprus), Vicki Macris (University of Alberta, Canada), Alpesh Maisuria (Anglia Ruskin University, Chelmsford, England), Spyros Themelis (Middlesex University, London, England), Periklis Pavlidis (Aristotle University of Thessaloniki, Greece), Peter Perikles Trifonas (Ontario Institute of Studies in Education, University of Toronto, Canada), Nosheen Rachel-Naseem (Middlesex University, London, England), Debbie Tooke (Memorial University, Faculty of Education, Newfoundland and Labrador, Canada), Paul Welsh (Christ Church Canterbury University, England), Sara Zamir (Ben-Gurion University, Eilat, Israel)

**Important Dates**

Participants should submit an abstract of 300 words by: 15 January 2011.

Proposals (500 words) for Panel and Round Table Discussions are welcome.

Notification of acceptance of paper presentation by: 15 February 2011.

Full papers should be submitted by: 30 May 2011.

The papers will be peer reviewed and published in the Conference Proceedings.

Selected papers will be published in Special Issues of *Jeeps, Cultural Logic* and *Kritiki*.

Abstracts should be sent by email to the following addresses:

DAVE HILL: dave.hill35@btopenworld.com
KOSTAS SKORDOULIS: kostas4skordoulis@gmail.com

**Conference Fee**

The Conference fee is 300 Euros.

The Conference fee for participants from Eastern Europe and for full-time PhD students from all countries, is 100 euros

The Conference fee for participants from Greece, and all those in hardship is 50 Euros

The participation of unemployed and colleagues from the third world is free/no fees.

The fee covers participation in the conference, the book of abstracts, coffee/tea/refreshments during conference breaks and participation in the conference dinner in a traditional taverna.

Please could fees be paid directly into the following bank account:

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**Venue and Accommodation**

The venue of the Conference is the city of Athens and possibly the surrounding areas.

Part of the Conference may take place in an area out of Athens. This will depend on Athens Hotel prices since mid-July is a tourist high season. The local Organizing Committee will negotiate hotel prices after the number of international participants is finalized.

**Local Organizing Committee**


**Hephaestus 2nd International Conference:**

*Critical Education*