

36th National Congress of the Italian Society for the History of Physics and Astronomy

Naples, October 04-07, 2016

PROGRAMME

4 October 2016 – Tuesday

Dipartimento di Fisica “Ettore Pancini”, Aula Magna “E. R. Caianiello”

14:30 *Registration*

15:00 **LS** *Opening remarks by institutional representatives*

L. De Magistris, Mayor of Naples (tbc)

L. Merola, Director of the Department of Physics “Ettore Pancini”

G. La Rana, Director of the I.N.F.N. Section of Naples

Invited talks:

15:30 **LS** **G. La Rana**

The first 50 years of the INFN Section of Naples

16:00 **LS** **P. Rossi**

Death and resurrection of Field Theory: 1960-1975

16:40 *Coffee break*

Panel Discussion (coordinated by **P. Tucci**): Vertical and transversal skills: the role of research in the history of physics and astronomy in education

17:00 **LS** **P. Rossi**

Ignoranza della storia e politiche della ricerca

- 17:10 **LS** **A. Garuccio**
La formazione dei ricercatori in Storia della Scienza
- 17:20 **LS** **M. Michellini**
Didattica e Storia della Fisica
- 17:30 **LS** **S. Oss**
Fisica e comunicazione scientifica
- 17:40 **LS** **F. Bonoli**
Storia e cultura dell'Astronomia
- 17:50 **LS** **I. Chinnici**
Il patrimonio storico-scientifico: problema o risorsa?
- 18:00 **LS** *Discussion*
- 18:30 **LS** *Conclusions*
- 19:00 *End of sessions*

Special evening event: Napoli, matti da slegare

20:30 **Convento di S. Domenico Maggiore, Sala del Capitolo**

- Presentation of the docufilm “*Il giardino chiuso*”

- **VS** T. Rinaldi, C. Patruno: “*La 'rivoluzione' e la 'follia' di Masaniello*”

5 October 2016 – Wednesday

Dipartimento di Fisica “Ettore Pancini”, Aula Magna “E. R. Caianiello”

Special session: Historical Collections of Scientific Instruments in Naples and Southern Italy

Communications (15 min. + 5 min. discussion):

9:00 **LS** **M.R. Cavaliere, G. Molisso, L. Palma, M.C. Petillo, P. Romano, D. Rossi**

Progetto NEMO: una rete per la salvaguardia e la valorizzazione del patrimonio storico-scientifico delle Scuole Napoletane

9:20 **LS** **L. Franchini, M. Moretti, A. Oropallo**

The Physics Cabinet of the Liceo “Cuoco-Campanella”

9:40 **LS** **P. Di Lorenzo**

Historical scientific instruments in Caserta and surroundings: collections and museums

10:00 **LS** **M. Falivena, R. Lanzillotti**

Gli antichi strumenti scientifici del Liceo “T. Tasso” di Salerno

10:20 **LS** **G. Abate**

The “Irpinian Science Museum” of Avellino: history and finality

10:40 *Coffee break*

11:00 **LS** **A. Apuzzo, A. Arpino, M.G. Attardi, M. De Rosa, A. Russo, F. Tortora**

The ancient nautical and physical instruments of the Technical School “Nino Bixio”

11:20 **LS** **P. Di Lorenzo**

Scientists, makers and instruments between educative experiences and research ones in Science in South Italy (1861-1920s)

Session: Didactics of Physics

11:40 **LS** **P. Cerreta**

Mach, principles of dynamics and Newton's bucket

12:00 **LS** **E. Balzano, E. D'Ambrosio, R. Figari**

An algorithm-based introduction to the evolution of physical systems

12:20 **LS** **P. Cerreta, V. Favale**

The couple of Nasir al-Din al-Tusi

12:40 **LS** **E. Balzano**

Relationships between research and practice in science education

13:00 *Lunch break*

Ospedale di S. Maria della Pace, Sala del Lazzaretto

15:00 *Opening remarks by institutional representatives*

Special session: Scientific instruments in context

Invited talks

15:20 **VS** **U. Baldini**

Scienza e istruzione nel Meridione dal primo Ottocento al primo Novecento: un problema storiografico

16:00 **VS** **R. Mantovani**

Scientific instruments and force-feeding in the XIX century: Vincenzo Leonardo Cera's "Sitoforo"

Communications (15 min. + 5 min. discussion):

16:20 **VS** **E. Corradini**

The Physics Cabinet of the Este Dukes and the Museum of Physics at the University of Modena between history and virtual reconstruction

16:40 *Coffee break*

17:00 **VS** **S. Bertelli, P. Lenisa, G. Zini**

Physics and Metaphysics? Science at the times of de Chirico and Carrà

17:20 **VS** **L. Serra, A. Giatti, P. Brenni**

The pneumatic pump from the Physics Cabinet at the Mariano College in Bergamo

17:40 *End of sessions*

17:45 - 19:15 *Annual SISFA General Assembly*

21:00 *Social dinner* at “**Masseria Monteoliveto**”: *siamo fritti!*

VS with the special event “**Ettore Majorana: il processo**”

6 October 2016 – Thursday

Dipartimento di Fisica “Ettore Pancini”, Aula Magna “E. R. Caianiello”

Session: Stars and around

Communications (15 min. + 5 min. discussion):

9:00 **LS M. Calamia**

Italian historical meteorological observatories (OMSI)

9:20 **LS D. Galli, S. Bianchi, A. Gasperini**

The origins of astrophysics in Florence

9:40 **LS M. Realdi**

Astronomers in a strange land. British site-testing campaigns in Franco's Spain (1965-1975)

10:00 **LS V. Zanini**

Giovanni Santini, the Meridian Circle and the *Paduan Catalogues*: the top of classical astronomy in the XIX century in Italy

10:20 **LS M.L. Tuscano**

About two unpublished manuscripts by Gabriele Bonomo (1694-1760), Sicilian mathematician: reverberations of his work concerning time measurement

10:40 **LS M. Gargano**

The development of astronomy in Naples before the Capodimonte Observatory establishment

11:00 *Coffee break*

11:20 **LS P. Molaro**

Francesco Fontana and the “astronomical” telescope

11:40 **LS** **A. Mandrino, A. Visconti**

Teaching astronomy between practice and theory at the Astronomical Observatory of Brera (1803-1825)

Session: From antiquity to modern era

Communications (15 min. + 5 min. discussion):

12:00 **LS** **G. Boscarino**

The modern theories of chaos and Lucretius' clinamen

12:20 **LS** **D. Capecchi**

The role of mathematicians in the development of science. A new insight

12:40 **LS** **Y. Zik, G. Hon**

Giovan Battista della Porta (1535-1615): a magician or an optician?

13:00 *Lunch break*

Osservatorio Astronomico di Capodimonte

15:00 **LS** *Opening remarks by institutional representatives*

M. Della Valle, Director of the INAF-Osservatorio Astronomico di Capodimonte

Special session (with the attendance of AIF members): Gravitational waves: a century of General Relativity predictions

Invited talks

15:10 **LS** **F. Vetrano**

GW150914: the end or the beginning of an exciting challenge?

15:50 **LS** **R. Lalli, A. Blum, J. Renn**

Back with a Flourish: social and epistemic factors in the postwar Renaissance of General Relativity

16:30 *Coffee break*

Communications (15 min. + 5 min. discussion):

16:50 **LS** M. Bassan, L. Narici, A. La Rana

Gravitational interferometers in Italy 1976: a first timid attempt

17:10 **LS** A. La Rana, L. Milano

The early history of gravitational wave detection in Italy: from the first resonant bars to the beginning of the Virgo collaboration

17:40 **LS** P. Di Mauro, A. Pagano

Criticism of the “vectorialists” C. Burali-Forti and T. Boggio to General Relativity

18:00 **LS** S. D'Agostino

The fundamental dichotomy between gravitation in Einstein's General Relativity and Maxwell's ether and electromagnetic waves

18:20 *Guided visit of the MuSA - Museo degli Strumenti Astronomici*

19:20 *End of sessions*

Special evening event: Napoli sotto le stelle

20:30 **Osservatorio Astronomico di Capodimonte**

- **LS** P. Molaro: *“Il napoletano Francesco Fontana, geniale costruttore di telescopi e grande astronomo”*

- Unione Astrofili Napoletani: osservazione ai telescopi

7 October 2016 – Friday

Dipartimento di Fisica “Ettore Pancini”, Aula Magna “E. R. Caianiello”

Session: Physics between the XVIII and XIX centuries

Communications (15 min. + 5 min. discussion):

9:00 **LS** **R. Pisano, P. Bussotti**

Reading Newton Geneva edition in the historical epistemology of science

9:20 **LS** **L. Guzzardi**

Ruggiero Boscovich and “the forces existing in Nature”

9:40 **LS** **D. Marmottini, R. Pisano**

Reading Lagrangian methods in Maxwell's electromagnetic theory.
Historical epistemology reflections

Session: Physics in the XX century

Communications (15 min. + 5 min. discussion):

10:00 **LS** **L. Peliti, R. Rechtman**

Einstein's approach to Statistical Mechanics: the 1902-04 papers

10:20 **LS** **R. Figari**

Particle tracks in a cloud chamber: the Mott's conjecture (1929)

10:40 **LS** **A. Rossi**

Federigo Enriques between popularization and scientific criticism

11:00 *Coffee break*

11:20 **LS** **G. Albertini, A. Siculo**

Write not to be understood

11:40 **LS** **V. Cioci, A. Drago**

The problem of the choice in theoretical physics from Galileo to Einstein

12:00 **LS** **A. Drago**

Looking for an alternative formulation of quantum mechanics

12:20 **LS** **N. Amoruso**

Symmetry or differential equations. Adding a case study on conformal field theory

12:40 *Lunch break*

Scuola Militare “Nunziatella”, Aula Magna “F. De Sanctis”

14:30 **VS** *Opening remarks by institutional representatives:*

Col. **F. Aceto**, Commander of the *Scuola Militare “Nunziatella”*

A. Ortis, President of the *Associazione Nazionale Ex Allievi Nunziatella*

G. S. Poli IV, direct descendant of Giuseppe Saverio Poli

Special session: Giuseppe Saverio Poli (1746-1825) and the development of science in Southern Italy between the XVIII and XIX centuries

Invited talks

14:40 **VS** **S. Esposito**

Enlightenment in the Kingdom of Naples: the legacy of Giuseppe Saverio Poli through archive documents

15:20 **VS** **M. Toscano**

Giuseppe Saverio Poli as a collector between Natural History and antiquarianism

Communications (15 min. + 5 min. discussion):

16:00 **VS** **M. Torino**

La dispersione delle collezioni di Giuseppe Saverio Poli e la *damnatio memoriae* del suo erede scientifico

16:20 **VS R. Mantovani**

A successful textbook between the XVIII and XIX centuries: Giuseppe Saverio Poli's *Elements of Experimental Physics*

16:40 **VS L. De Frenza**

The poles of healing. Mineral magnetism vs animal magnetism

17:00 *Coffee break – Visit to the exhibition “Gli strumenti scientifici per l'insegnamento alla Nunziatella tra '700 e '800”*

17:20 **VS L. Fregonese**

Jesuit scientific Latin didactic poetry in the XVIII century: traditions, contents, images of science

17:40 **VS A. Borrelli**

Il *Viaggio Celeste* di Giuseppe Saverio Poli

18:00 **VS F.M. Lo Faro**

Giuseppe Saverio Poli e la scienza a Palermo. Gli anni siciliani di colui che “regola le cose divine e umane”

18:20 **VS R. Chiapperini**

Giuseppe Saverio Poli (Molfetta, 1746 - Naples, 1825) and his hometown

18:40 *Session ending remarks*

18:45 **VS A. Ortis**

Energia e sviluppo sostenibile

19:00 *Congress ending remarks*

Special evening event: Napoli, raggi cosmici in metrò

20:30 **Stazione “Toledo” della Metropolitana di Napoli**

- **VS** P. Mastroserio: *“Un telescopio per raggi cosmici nella Stazione Toledo”*