



ECT*



EUROPEAN CENTRE FOR THEORETICAL STUDIES IN NUCLEAR PHYSICS AND RELATED AREAS TRENTO, ITALY

Institutional Member of the European Expert Committee NUPECC



Castello di Trento ("Trint"), watercolor 19.8 x 27.7, painted by A. Dürer on his way back from Venice (1495). British Museum,

New perspectives on Neutron Star Interiors

Trento, October 09 –13, 2017

Main Topics

- Investigation on the inner structure on neutron stars, existence of quark, hybrid and strange stars,
- Tests of extreme dense QCD phase diagram at finite temperature,
- Crust+core models and pulsar models, strong magnetic field in neutron stars, cooling of neutron stars,
- New observables from X-ray and gamma satellites (NICER, LOFT, ATHENA),
- Gravitational wave signals from isolated neutron stars or merging neutron star binaries,
- Future experimental facilities for neutron star observables.

Keynote participants

Gordon Baym (*University of Illinois, Urbana*), David Blaschke (*University of Wrocław, Poland*), Pawel Haensel (*Nicolaus Copernicus Astronomical Center, Poland*),
Andrew Cummings (*McGill University, Montréal*), Chris Pankow (*Northwestern University*), Adriana Raduta (*IFIN-HH, Bucharest*),
Michi Bauböck (*Max Planck Institute Garching, Germany*), Marco Limongi (*INAF, Rome*), Pierre Pizzoneo (*University of Milan*),
Armen Sedrakian (*Frankfurt Institute for Advanced Studies*), Fridolin Weber (*San Diego State University*), Pablo Cerda-Duran (*University of Valencia*),
Nanda Rea (*Institute of Space Sciences, Cerdayola del Valles, Spain*), Szabolcs Borsányi (*University of Wuppertal, Germany*),
Michal Bejger (*Nicolaus Copernicus Astronomical Center, Poland*), Brynmor Haskell (*Nicolaus Copernicus Astronomical Center, Warsaw*),
Máté Csánád (*Eötvös University, Hungary*), Giampietro Cagnoli (*VIROGO, Laboratoire des Matériaux Avancés, France*),
Ian Jones (*University of Southampton, UK*)

Organizers

Gergely Gábor Barnaföldi (*Wigner Research Centre for Physics Budapest, Chairman*),
Gordon Baym (*University of Illinois, Urbana*),
Laura Tolós (*Institute of Space Sciences, Cerdayola del Valles, Spain*).

Director of the ECT*: Professor Jochen Wambach (ECT*)

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