



ECT*



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

Institutional Member of the ESF Expert Committee NuPECC



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

British Museum, London.

Neutron-rich matter and neutron stars

September 30 – October 4, 2013

Main Topics

Extracting neutron star radii from observations of X-ray bursts and burst oscillations.

New developments on microscopic calculations of the equation of state of dense neutron-rich matter.

Implications of the constraints from observations and nuclear theory for the equation of state at super-nuclear densities.

Impact on astrophysical simulations of neutron-rich environments (neutron star mergers and proto neutron-star cooling).

Constraints on superfluidity and other nuclear properties obtained from observations and simulations of neutron star cooling.

Speakers and participants include

Almudena Arcones (*Darmstadt*), Alexander Bartl (*Darmstadt*), Andreas Baustein (*Thessaloniki*), Alessandro Drago (*Ferrara*), Alexandros Gezerlis (*Guelph*), Kai Hebeler (*Darmstadt*), Dmitry Kobyakov (*Umea*), Thomas Krueger (*Darmstadt*), Evan O'Connor (*CITA*), Dany Page (*Mexico City*), Francesco Pederiva (*Trento*), Juri Poutanen (*Oulu*), Luke Roberts (*Caltech*), Bob Rutledge (*McGill*), Gang Shen (*INT*), Andrew Steiner (*INT*), Vittorio Soma (*Darmstadt*), Valery Suleimanov (*Tuebingen*), Ingo Tews (*Darmstadt*), Laura Tolos (*Barcelona*), Joachim Trümper (*Munich*), Isaac Vidana (*Coimbra*), Maria Voskresenskaya (*Darmstadt*), Wolfram Weise (*ECT**)

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