



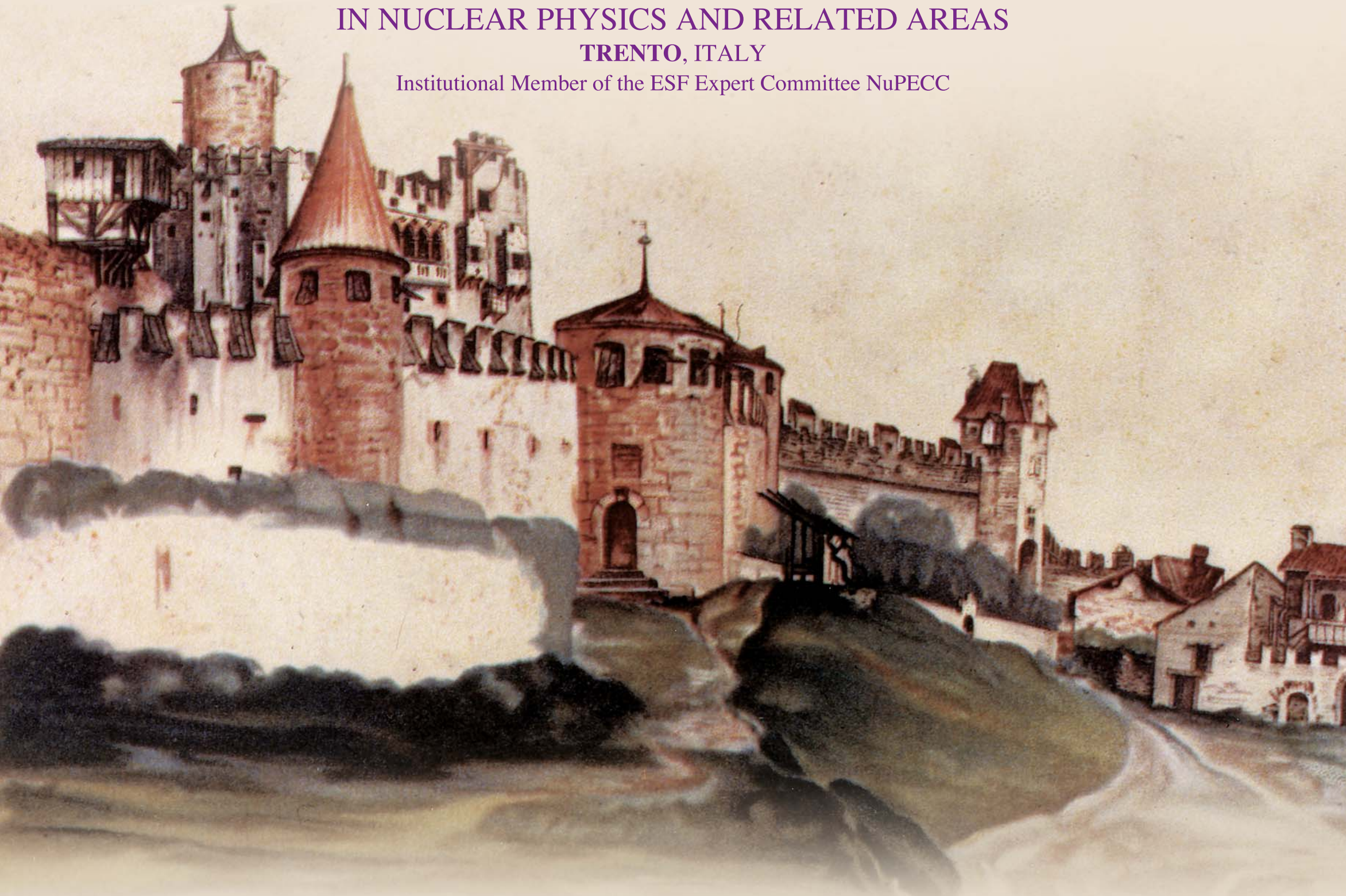
ECT*



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.

ECT* Workshop on The Lead Radius Experiment and Neutron Rich Matter in Astrophysics and in the Laboratory August 3-7, 2009

The Lead Radius Experiment (PREX) uses parity violation to accurately determine the radius of the neutron distribution in ^{208}Pb . This fascinating measurement has remarkably broad implications for nuclear structure, astrophysics, atomic parity violation, and low energy tests of the Standard Model.

Topics:

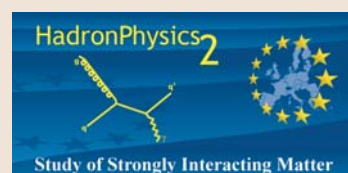
- The PREX experiment.
- Neutron densities and nuclear structure.
- Atomic parity non-conservation and neutron densities.
- Other experiments probing neutron densities or the nuclear symmetry energy.
- Neutron rich matter in astrophysics including neutron star and neutron star crust properties.

Speakers will include:

Marcello Baldo (Catania), M. Bender (Gradignan), K. Blaum (Heidelberg), Angela Bracco (Milano, Italy), Alex Brown (East Lansing), Ed Brown (East Lansing), D. Budker (Berkeley), Pawel Danielewicz (East Lansing), Stephane Gorieli (Bruxelles), Mikhail Gorshteyn (Indiana), Ian Jones (Southampton), Jim Lattimer (Stony Brook), Bao-An Li (UT Commerce, Texas), Bernd Krusche (Basel), Krishna Kumar (Amherst), R. Michaels (JLAB), Peter Moller (LANL), Oscar Moreno (Madrid), Ben Owen (Penn State), P. Ring (Munich), R. Rutledge (Mcgill), C. Scheidenberger (GSI), Ingo Sick (Basel), Paul Souder (Syracuse), A. Steiner (East Lansing), Mario Stoitsov (Oak Ridge), B. Tsang (East Lansing), Guido Urciuoli (INFN, Roma, Italy), L. Wansbeek (KVI)

Organizers:

Charles Horowitz (co-ordinator, Indiana Univ.), horowit@indiana.edu
P.G. Reinhard (Univ. Erlangen), Paul-Gerhard.Reinhard@theorie2.physik.uni-erlangen.de
K. de Jaeger (Jefferson Lab.), kees@jlab.org



Director of the ECT*: Professor Achim Richter (ECT*)
Vice Director: Professor M. Traini (Trento)

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For local organization please contact: Cristina Costa or Ines Campo - ECT* Secretariat - Villa Tambosi - Strada delle Tabarelle 286 - 38123 Villazzano (Trento) - Italy
Tel.: (+39-0461) 314-730 or -721 Fax: (+39-0461) 935007, E-mail: ect@ect.it or visit <http://www.ect.it>