SUMMER SCHOOL on Neutron Detectors
and Related Applications
NDRA-2016

29th June – 2nd July, 2016.
Riva del Garda, Trento, Italy.

The aim of the school is to illustrate principles, methodologies and most recent applications of neutron detection technologies. In particular, the school will tackle various arguments that span from neutron interaction principles, materials for neutrons detectors, neutron sources, Monte Carlo simulation codes, up to applications with neutrons.

The school is addressed to PhD students, Post-Docs and young researchers with backgrounds in Engineering and Physics.

TOPICS
- Neutron interaction with materials.
- Physics of neutron detectors.
- Materials for neutron detection.
- Monte Carlo simulation.
- Gas detectors for neutrons.
- Neutron sources.
- Application of neutron detectors.

LECTURERS

Zane Bell (*Oak Ridge National Laboratories, USA*)
- Physics of neutron interaction with materials.

Stanislav Pospisil (*Czech Technical University in Prague, Czech Republic*)
- Neutron detection principles and neutron imaging.

Marek Moszynski (*National Centre for Nuclear Research, Poland*)
- Scintillators for neutrons.

Marco Durante (*TIFPA – Trento*)
- Neutrons in radiobiology and space.

Peter Schillebeeckx (*EC-JRC-IRMM, Belgium*)
- Data analysis in neutron detection

Gregor Kramberger (*Josef Stefan Institute, Ljubljana, Slovenia*)
- Solid state neutron detectors

Richard Hall-Wilton (*European Spallation Source, Lund, Sweden*)
- Neutron sources.

Alfredo Ferrari (*CERN, Switzerland*)
- Monte Carlo methods.

Ralf Engels (*Forschungszentrum Jülich, Germany*)
- Detector design.

Bruno Guerard (*Institute Laue-Langevin, France*)
- Gas detectors.

Paul Schotanus (*Scionix, Netherlands*)
- Design and development of commercial scintillators.

ORGANIZING COMMITTEE

Marco Durante (*INFN-TIFPA, Trento, Italy*) Marco.Durante@tifpa.infn.it

Alberto Quaranta (*Department of Industrial Engineering, University of Trento and INFN-TIFPA, Trento, Italy*) Alberto.Quaranta@unitn.it

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FEES

Senior researchers	Before 1st June 375 €	After 1st June 450 €
Students	Before 1st June 275 €	After 1st June 350 €

A maximum of 60 registrations will be accepted. People who intend to join the school can preliminarily contact the organizing committee.

LOCATION - The school will be held at Astoria Park Hotel****.

WEBSITE

http://webmagazine.unitn.it/en/evento/dii/7068/summer-school-on-neutron-detectors-and-related-applications

POSTER AND ORAL PRESENTATIONS

PhD and Post-Doc students are invited to present a poster with a short oral introduction during a dedicated session of the school. Abstract submission will be available soon.

CONTRIBUTORS (Preliminary List)

The school is kindly supported by:

- TIFPA – INFN
- Department of Industrial Engineering – University of Trento
- 5th INFN commission (GV)
- Scionix
- CAEN SpA

HOW TO REACH RIVA DEL GARDA
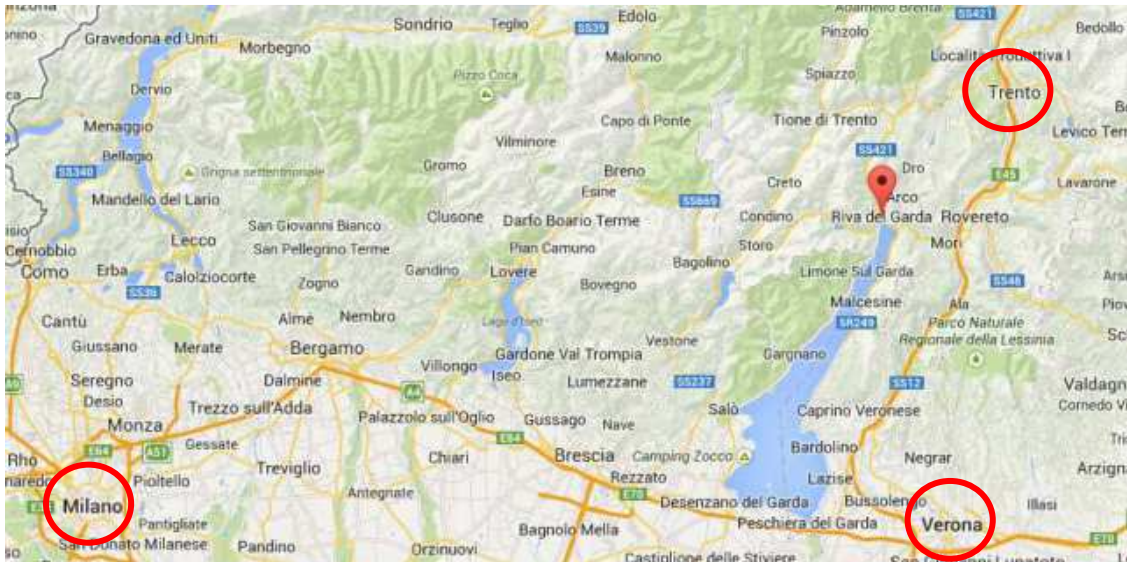
Motorway

A22, Brennero motorway, Rovereto sud exit: 15 minutes from the toll booth.

By coach

Direct links from Trento and Rovereto (Trentino Trasporti buses); from Verona and Desenzano (A.P.T.V. buses); from Brescia and Milan (S.I.A. buses).

By plane

- Verona Airport "Valerio Catullo" (recommended)
- Brescia Airport "Gabriele D'Annunzio"
- Bergamo Airport "Orio al Serio"
- Milano Airports "Malpensa" and "Linate"
- Venezia Airport "Marco Polo"

By train

Nearest station is Rovereto (Brennero line) 20 km from Riva del Garda.