



## SUMMER SCHOOL on Neutron Detectors and Related Applications NDRA-2014

**30<sup>th</sup> June - 4<sup>th</sup> July, 2014.**  
**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 deals with neutron-matter interaction principles suitable to neutron detection, materials for neutron detectors, signal processing, Monte Carlo simulation codes and interdisciplinary applications of neutrons.

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

### TOPICS

- Neutron interaction with materials.
- Principles of neutron detection.
- Inorganic and organic scintillators for neutrons.
- Solid state and semiconductor detectors for neutrons.
- Monte Carlo techniques for efficiency analyses.
- n- $\gamma$  discrimination techniques.
- Neutron sources.
- Applications: material analysis, imaging, nuclear waste, medical.

## LECTURERS

Marek Moszynski (*National Centre for Nuclear Research, Poland*)

Stanislav Pospisil (*Czech Technical University in Prague, Czech Republic*)

Zane Bell (*Oak Ridge National Laboratories, USA*)

Peter Schillebeeckx (*EC-JRC-IRMM, Belgium*)

Gregor Kramberger (*Josef Stefan Institute, Ljubljana, Slovenia*)

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

Cinzia Da Vià (*Department of Physics, Manchester, UK*)

Alfredo Ferrari (*CERN, Switzerland*)

Ralf Engels (*Central Institute for Engineering, Electronics and Analytics, Forschungszentrum Jülich, Germany*)

Natalia Zaitseva (*Lawrence Livermore National Laboratory, USA*)

Matthieu Hamel (*CEA, Saclay, France*)

Paul Schotanus (*Scionix, Netherlands*)

Bruno Guerard (*Institute Laue-Langevin, France*)

Lina Quintieri (*ENEA, Italy*)

Saverio Altieri (*University of Pavia, Italy*)

Gabriele Pasquali (*University of Firenze, Italy*)

Paolo Finocchiaro (*LNS, INFN, Italy*)

## ORGANIZING COMMITTEE

**Alberto Quaranta** (*Department of Industrial Engineering, University of Trento, Italy*)

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## FEES

Senior researchers	Before 1 <sup>st</sup> June 375 €	After 1 <sup>st</sup> June 400 €
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Students	Before 1 <sup>st</sup> June 275 €	After 1 <sup>st</sup> June 300 €
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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\*\*\*\*. A list of hotels with fixed prices will be soon available.

## WEBSITE

<http://www.unitn.it/dii/evento/33970/ndra-2014-summer-school-on-neutron-detection-and-related-applications> Construction in progress.

## POSTER AND ORAL PRESENTATIONS

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

## 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"
- Aeroporti Milano "Malpensa" and "Linate"
- Venezia Airport "Marco Polo"

### By train

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