# CALL FOR PAPERS

# **Abstract Submission Deadline** >>> December 1, 2014 <<<

Short Courses

Technical Visit

Industrial Exhibits

Companion Program

- Plenary Sessions
- Oral Sessions
- Poster Sessions
- Workshops

General Chair: Prof. Abdallah Lyoussi

Steering Committee Chair: Dr. Bruno Gonçalves Scientific Committee Chair: Prof. Michel Giot Organizing Committee Chair: Dr. Bruno Gonçalves

Workshops Organization Chair: Dr. Christelle Reynard-Carette Short-Courses Organization Chair: Dr. Ludo Vermeeren

# **Important Dates**

Abstract submission deadline: December 1, 2014 Notification of acceptance: January 15th 2015 Final paper submission deadline: April 6, 2015

Open registration: January 15, 2015

### **Abstract Submission**

Authors are invited to submit their abstracts electronically via the conference website. Abstract must be at least 300 words and not exceed 1000 words. During electronic submission, a topic most closely associated with the author's work may be chosen, however this is not binding. Please indicate whether you prefer an oral or poster presentation. All abstracts will be reviewed by the corresponding Program Chairs and their committees. Accepted papers will be sorted between oral and poster presentation and assigned a location within the conference schedule and program.

#### **Publications**

All papers presented, oral or poster, at the ANIMMA 2015 meeting will be published in the Conference Record. In addition papers that contain important information of lasting value are requested for submission to the IEEE Transactions on Nuclear Science Review. All submitted papers will be subject to a formal review process with feedback provided to the authors.



ANIMMA

Centro de Congressos de Lisboa April. 20-24, 2015 Praca das Indústrias 1300-307 Lisboa, Portugal Contact:

animma@ipfn.ist.utl.pt www.animma.com



# Centro de Congressos de Lisboa 20-24 April 2015

The fourth international conference on Advancements in Nuclear Instrumentation Measurement Methods and their Applications

Instrumentation and Measurement in Fusion diagnostics and technology

**Nuclear power reactors** 

Research reactors

**Nuclear fuel cycle** 

Decommissioning, dismantling and remote handling

Safeguards, homeland security

Severe accident monitoring

**Environmental and medical sciences** Education, training and outreach

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# **Conference** Scope

ANIMMA conference brings together scientific, academic and industrial communities interested in, or actively involved in research and developments re-lated to nuclear instrumentation and measurement methods. The program is focused on instrumentation, but em-phasizes the latest developments in all measure-ment stages: nuclear radiation detection and in-pile measurements, modelling, electronics, signal acqui-sition and analysis, interpretation and associated training/education activities.

**ANIMMA** offers an outstanding opportunity for scientists and engineers to meet and discuss new ways to address complex problems and find advanced solutions in nuclear instrumentation and measure-ment sciences and technologies.

### Contributed papers

Selection of contributed papers for oral or poster presentation will be based on the abstracts, and be performed by the Scientific Committee. The committee will reject those which do not reach a sufficiently high standard, fall outside the scope of the conference or describe designs or results which have been previously presented elsewhere. Detailed instructions for the preparation of the full papers, the posters, and the oral presentations will be available on the conference web site and link will be sent with notification of acceptance

### Workshops

Several scientific workshops will be proposed on numerical works and on experimental research and development from fundamental physics to direct applications (Nuclear Instrumentation, Radiation Detection Systems, Thermal Measurements, Real Time Measurements, ...). A detailed program will be available shortly on the conference web site.

Contact: Dr. Christelle Reynard-Carette (christelle.carette@im2np.fr)

### Short Course Initiative

An advanced program of short courses will be offered at the start of ANIMMA 2015 conference.

Starting from the physical principles, the course will discuss the performances and the limitations of various radiation detectors that can be used in nuclear reactors. a special emphasis will be put on instrumentation and diagnostics in fusion reactors.

Updated information, detailed program and schedule will be available shortly on the conference web site.

Contact/chair: Dr. Ludo Vermeeren (Ivermeer@SCKCEN.BE)

# Satellite Meetings

The opportunity may be given to organize satellite meetings within the scope of the congress. Please, contact the Organizing Committee on this matter animma@ipfn.ist.utl.pt

### Industrial Exhibition

A technical exhibition will be on display during the congress and will constantly be available to the participants during the 4 days of the meeting.





# **Scientific Program:**

# **P**

#### Fundamental physics

- Nuclear physics, Particle physics
- · Advanced electronics for radiation detection and radiation effects mitigation
- · Innovative data analysis methodologies



### **Fusion Diagnostics and Technology**

- · Burning plasma diagnostics
- Radiation hard detectors
- Experimental techniques for high-temperature plasmas
- · High-availability electronics for data acquisition and control



### Nuclear power and research reactors

- Research reactors (radiation detection, in-pile measurements of physical parameters including temperature, dimensions, gas release, etc.)
- Material Testing Reactors
- Safety experiments
- Nuclear Power Plants, GEN IV Reactors: SFR, VHTR, LFR, GSFR...
- Nuclear Fusion Reactors



### Nuclear fuel cycle



- Nuclear Fuel Cycle facilities
- Dismantling Operations
- Safeguards
- · Nuclear Material and Spent Fuel
- Radioactive Waste Management
- Fast Neutron Reactors
- Nuclear Fusion reactors, Tritium breeding blankets



### Decommissioning, dismantling and remote handling

- · Material and waste management
- Techniques and Process Improvements: Radiological Characterisation, Decontamination, Waste Treatment
- Remote Handling



# Safeguards, homeland security

- Illicit Trafficking
- Nuclear material control and characterization
- · High efficiency neutron measurements
- Nuclear fuel control and management



# Severe accident monitoring

- High temperature measurements
- · High pressure measurements
- · Radiation measurement in harsh media
- Electronics hardening
- · Wireless and remote robotic measurements



#### **Environmental and medical sciences**



- · Advancements in Mass Spectrometry measurements
- Application of radioactive tracers
- Radiography, Imagery, Tomography...
- · Methods in extreme conditions



# Education, training and outreach

- Experimental Sciences
- Basics in Instrumentation and Measurement Sciences and Technologies
- · Measurement Methods and their Applications
- PhD's Schools, Refresh Courses, Summer Schools.
- Communicating Nuclear to the public





