

NEWSLETTER

14th March, 2024

WORKSHOP ON “ARTIFICIAL INTELLIGENCE AND RADIATION PROTECTION”

PIANOFORTE is organizing the workshop on “**Artificial Intelligence and Radiation Protection**” aiming at **presenting and discussing current and future artificial intelligence implementations in various sectors of radiation protection**, that include medical applications, radiation dosimetry, radiobiology, radioecology, emergency preparedness, response and recovery.

The workshop **objectives** are to:

- a) delineate the relevance and applicability of artificial intelligence and big data technologies in radiation protection domains and identify the thematic areas that appear to be more susceptible to artificial intelligence implementations,
- b) identify and develop links with scientific communities specializing on artificial intelligence and big data technologies,
- c) promote the artificial intelligence uptake and application in the 3rd PIANOFORTE open call.

The workshop will be organized by **NCSR “Demokritos”** on its premises in Agia Paraskevi, Attica, Greece, on **18th and 19th April 2024** comprising thematic presentations followed by discussion sessions that include:

- the state-of-the-art of artificial intelligence applications in radiation protection,
- deliberations on future research directions that will be considered in the formulation of the topics to be funded under the 3rd PIANOFORTE open call.

Workshop participation is free-of-charge.

Please register to the event at <https://form.jotform.com/240533478842057>

before 27th March 2024.

TRAINING COURSE IN ASSESSING RISK TO HUMANS AND THE ENVIRONMENT

Norwegian University of Life Sciences (NMBU) will host a two-week intensive course in Assessing Risk to Humans and the Environment, funded by PIANOFORTE.

The training course, which will be organized from **17th to 28th June 2024** is a part of the ongoing MSc in Environmental Nuclear Sciences and is aimed at PhD students and young professionals. The course gives 5 ECTS, and certification for training in the ERICA Assessment Tool.

More details about the course can be found at <https://pianoforte-partnership.eu/calls/funded-training-courses>

If do you want to **register for the training course**, please send the following structured information to yevgeniya.tomkiv@nmbu.no **before 24th March 2024:**

- Family name
- Given name

- E-mail address
- Phone number
- Age
- Current occupation
- Affiliation (organization name, city and country)
- Vocational education, completed or current study or the like
- Time in years since completion of study or vocational training (if applicable)
- Command of English according to the Common European Framework (A1-C2) according to your own assessment
- Whether you would like accommodation covered by the course (in college campus housing)
- Whether the application is dependent on assignment of a travel grant
- Motivation and other information that will help the organizers to approve your registration (100 to 200 words)
- Any other information or questions that you regard as relevant for the selection

17TH EURADOS SCHOOL "THE IMPORTANCE OF DOSIMETRY IN INNOVATIVE MEDICAL APPLICATIONS"

The European Radiation Dosimetry Group (EURADOS) invites all researchers and professionals to attend the 17th EURADOS School "The importance of dosimetry in innovative medical applications". AM2024 Spring School is aimed at giving the status of the art, focusing on the dosimetric aspects these new medical practices imply.

The topics of the school will try to cover the different elements and levels of the problem, from radiobiology and risk assessment questions, charged particle tracking in a microdosimetry framework, the matter of detecting fast pulsed radiation, the development of suitable dosimetry for multi-modal applications and the role of new numerical techniques in evaluating an accurate dose distribution in the patient.

EURADOS School can be followed onsite as well as online. A fee for online attendance of the School will be asked.

Please register for this event at www.eurados-registration.org before 25th March 2024.

XI INTERNATIONAL GEANT4 SCHOOL

The XI International Geant4 School was held at the Physics Department of the University of Pavia and the INFN Section of Pavia from the 14th to the 19th of January 2024. The activities were of two types: lectures on the basics of the Geant4 code and hands-on sessions where the students could apply the new acquired knowledge to practical cases in different contexts.

The school attended 36 students, 23 from Italy and 13 from foreign universities and institutions (coming from Bulgaria, Israel, Canada, Belgium, France, Greece, Austria, Hungary, Finland, United States, Germany, China and Canada), 18 PhD students, 5 MSc or graduated students, 10 researchers, 1 manager and 2 professors.

At the end of the school all the students could download, install and run the Geant4 code. They could also evaluate the simulation outputs both about its physical meaning and its statistical significance. Importantly, they acquired the knowledge to make simulations in the biophysical field, with a specific focus on the study of DNA damage with the Geant4-DNA module.

During the last day of the School, students could also test their level of learning through a written exam. All the students passed this test and obtained an official certificate.

More details about 2024 school can be found at <https://agenda.infn.it/event/37741/>

