The Abdus Salam
**International Centre
for Theoretical Physics**

IAEA
International Atomic Energy Agency

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Educational, Scientific
and Cultural Organization

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ICTP
1964–2024

11th Workshop on Collaborative Scientific Software Development and Management of Open Source Scientific Packages

Description:

Writing software has become central to research in many fields of science. This school aims to give early-career scientists an introduction to a variety of topics that help them write efficient, clean, maintainable and long-lived code that is useful beyond solving an immediate problem. In a mixture of talks and many hands-on sessions, the focus lies on showing best practices and building fundamental skills in creating, extending and collaborating on modular and reusable software.

18 - 29 November 2024

Trieste, Italy

Deadline:
25 September 2024

TOPICS:

- Modular, reusable software design
- Version control and release cycles
- Effective collaborative development with multiple co-authors
- Introduction to project management
- Structured documentation
- Automated testing frameworks
- Data visualisation
- Visualisation as a development tool
- Management of open source scientific packages
- Continuous integration & deployment
- Introduction to computer architectures and software optimization
- Python / shell scripts as glue code

LECTURERS:

A. CORBETTA, Eindhoven University of Technology, The Netherlands
A. FARNUDI, International Agency for Research on Cancer, France
L. GARRISON, University of Bergen, Norway
E. GHOBADPOUR, École normale supérieure de Lyon, France
I. GIROTTO, ICTP, Italy
D. GRELLSCHEID, University of Bergen, Norway

PREREQUISITES:

Participants are expected to have some experience in a programming language, this course is not suitable for beginners in programming.
Participants are required to attend 100% of the courses.

DIRECTORS:

Alessandro CORBETTA, Eindhoven TU/e, The Netherlands
Ivan GIROTTO, ICTP, Italy
David GRELLSCHEID, University of Bergen, Norway

ICTP LOCAL ORGANISER:

Ivan GIROTTO, ICTP, Italy

FURTHER INFORMATION:

E-mail: smr3982@ictp.it

Web: https://indico.ictp.it/event/10520/

Female scientists are encouraged to apply.

GRANTS:

A limited number of grants are available to support the attendance of selected participants, with priority given to participants from developing countries.
There is no registration fee.