



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

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IAEA  
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## **5<sup>th</sup> Workshop on Advanced Techniques for Scientific Programming and Management of Open source Software Packages**

**4 - 15 March, 2017**

**(Sharif University of Technology, Tehran, Iran)**

The Abdus Salam International Centre for Theoretical Physics, in collaboration with the Sharif University of Technology, is organizing the 5th edition of the Workshop on Advanced Techniques for Scientific Programming and Management of Open Source Software Packages, to be held in Tehran, Iran from 4th to 15th March 2017.

Modern scientific research work involves using computers for simulation, modeling, data processing and visualization. The growing complexity of those calculations favors using software packages that provide an abstract interface to computations through scripting language interfaces, modular software design, and code reuse. Such design patterns also facilitate transparent optimizations for modern multi-core architectures or accelerators, and specialization of contributors to subsets of a package program. Software package developers therefore need to learn how to work effectively in a collaborative environment.

This Hands-on Workshop focuses on disseminating best practices and building fundamental skills in creating, extending and collaborating on modular and reusable software frameworks with a scripting language interface. The curriculum also covers using modern collaborative software management tools, testing frameworks, and embedding structured documentation into software packages.

### **GRANTS**

A limited number of grants are available to support the travel and living expenses of selected participants, with priority given to participants working in a developing country and who are at the early stages of their career.

Since the workshop will be conducted in English, participants should have an adequate working knowledge of this language.

Other essential requirements are a strong knowledge of the Linux command line environment, as well as a good knowledge of one of the following programming languages: FORTRAN, C/C++ and/or Python.

*There is no registration fee.*

### **HOW TO APPLY FOR PARTICIPATION**

The Online Application can be accessed at the activity website: <http://indico.ictp.it/event/7952/>. Comprehensive instructions will guide you step-by-step on how to fill out and submit the application form.

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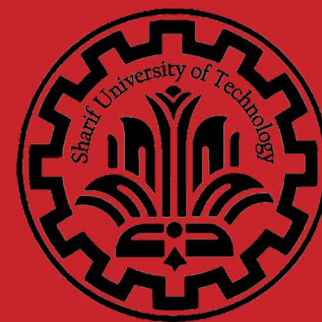
Islamic Republic of Iran  
Vice Presidency for Science and Technology



Islamic Republic of Iran  
MINISTRY OF SCIENCE,  
RESEARCH AND TECHNOLOGY



**Co-organized with**



**Sharif University of Technology**

### **Directors**

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### **Local Organizers**

**Mohammad Reza Ejtehad**

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(Sharif University of Technology,  
Tehran, Iran)

**DEADLINE**

to submit applications

**17 December 2016**

