







# International Workshop on Structured Light and Matter: Concepts and Applications

**September 17-23, 2016** 

# Institute for Advanced Studies in Basic Sciences (IASBS) in Zanjan, Iran

The Institute for Advanced Studies in Basic Sciences (IASBS) and the Abdus Salam International Centre for Theoretical Physics (ICTP) are organizing the autumn school on Structured Light and Matter from 17 to 23 September 2016. The School is intended for graduate students, post-doctoral fellows, faculty members, and others who would like to gain an understanding of the fundamentals of singular optics for application to research in their respective fields.

# **TOPICS INCLUDE**

- 1. Super-resolution and imaging techniques
- 2. Optical tweezers and medical applications
- 3. Holographic approach to shape a beam of massive particles
- 4. Fundamental tests of quantum mechanics
- 5. Quantum information with structured light
- 6. BEC and exciton-polariton condensates
- 7. Shaping light beams with a metasurface

#### **PARTICIPATION**

As Workshop will be conducted in English, participants should have an adequate working knowledge of this language. Although the main purpose of the Centre is to help researchers from developing countries, through a programme of training activities within a framework of international cooperation, a limited number of students and post-doctoral scientists from developed countries are also welcome to attend.

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

#### TO APPLY:

The Online application form can be accessed at: <a href="http://indico.ictp.it/event/7603/">http://indico.ictp.it/event/7603/</a>
You may address queries to:

Email at IASBS: slm2016@iasbs.ac.ir

Telephone: +98 24 33414747 Telefax: +98 24 33414747

For more information: <a href="http://iasbs.ac.ir/seminar/slm2016">http://iasbs.ac.ir/seminar/slm2016</a>

# **DIRECTOR**

**Ebrahim Karimi** (University of Ottawa)

# **LOCAL ORGANIZERS**

Joseph Niemela (ICTP - Trieste) Hamid Reza Khalesifard (IASBS - Zanjan) Daryoush Abdollahpour (IASBS - Zanjan)

# **INVITED SPEAKERS**

**Miguel Alonso** (Univ. Rochester) **Peter Banzer** (MPI - Erlangen) **Sir Michael Berry** (Univ. Bristol) **Etienne Brasselet** (CNRS - Bordeaux ) **Mark Dennis** (Univ. Bristol) **Andrew Forbes** (Univ. Witwatersrand) **Natalia Litchinitser** (Univ. Buffalo) **Gerd Leuchs** (MPI - Erlangen) **Lorenzo Marrucci** (Univ. Naples) **Marat Soskin** (NASU - Kiev ) **Luis Sanchez-Soto** (Univ. Madrid) Bo Y. Thidé (Univ. Uppsala)

**DEADLINE** 

**30 JUNE 2016** 

