

SCHOOL ON INTERACTION OF LIGHT WITH COLD ATOMS

September 16-27, 2019

at Instituto de Física Teórica - UNESP, São Paulo, Brazil

LECTURERS

Eric Akkermans (Technion, Israel)
Mesoscopic physics of photons

Mikhail Baranov (IQOQI, Innsbruck, Austria)
Fermions

Michel Brune (ENS, France)
Quantum optics & optical cavities

Philippe W Courteille (IFSC-USP, Brazil)
Introductory course (atom-light interaction and basic applications)

Luiz Davidovich (UFRJ, Brazil)
Quantum information

Georgy Shlyapnikov (CEA-CRNS, France)
Dipolar gases

Juliette Simonet (U. of Hamburg, Germany)
Optical lattices

Jook T. M. Walraven (U. of Amsterdam, The Netherlands)
Quantum gases

Light-matter interaction is one of the oldest scientific topics, and also one of the broadest and most fundamental. Yet continuous developments of both new light scattering materials and new sources of light keep the interest in this topic alive. Impressive progress has been made during the past three decades in the preparation of cold matter and the suppression of classical noise, allowing for the emergence and even the experimental manipulation of special coherence properties of both matter and light. These developments generated applications in the fields of quantum optics and ultracold matter, for example, in quantum sensing and quantum information processing.

This school aims at training PhD and post-doc students (and selected master's students) in the physics of light interacting with cold atoms, introducing them to the basics and familiarizing them with applications in modern technology.

There is no registration fee and limited funds are available for travel and local expenses.

Application deadline:

July 7, 2019

Online application form and information:

<http://www.ictp-saifr.org/atom2019>

ORGANIZERS

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Gabriel Mindlin - U. de Buenos Aires

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