

São Paulo International Schools on Theoretical Physics



Minischool on Few-Body Physics

October 06 - 10, 2014

Instituto de Física Teórica - UNESP - São Paulo, Brazil

Quantum-mechanical few-body problems are of fundamental importance for all branches of microphysics. In this one-week interdisciplinary school, lectures will be presented on the correlated Gaussian method, a powerful tool used to solve quantum few-body systems in atomic and nuclear physics, and on the relevance of dimensionality in quantum few-body systems and quantum magnetism. Additionally, a review talk on universal behaviours will be presented and there will be daily sessions for resolving homework exercises.

The school is aimed at graduate students and researchers in the fields of nuclear, atomic, molecular, condensed-matter, particle physics and quantum chemistry with a basic knowledge of quantum mechanics.

Lecturers:

Dmitri Fedorov (Aarhus University/Denmark)

Correlated Gaussian method in quantum mechanics

Nikolaj Zinner (Aarhus University/Denmark)

Few-body physics in different dimensions

Alejandro Kievsky (Istituto Nazionale di Fisica Nucleare/Pisa)

Exploring universal behavior in few-body systems (Seminar)

Organizers:

Marcelo Yamashita (IFT-UNESP), **Lauro Tomio** (IFT-UNESP),

Aksel Jensen (Aarhus University/Denmark)

The online application form and more information can be found at:

<http://www.ictp-saifr.org/few-body>

There is no registration fee and limited funds are available for local and travel support of participants.

The application deadline is **August 11, 2014**

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