

Minischool on Biophysics of Protein Interactions

March 9 - 13, 2015

Instituto de Física Teórica - UNESP - São Paulo, Brazil

This school will compare different modern approaches to highly charged, structured, and disordered Coulomb systems. Its primary purpose will be to cross-pollinate the different theoretical, experimental and simulation approaches to progress towards a unified description of the electrostatic interactions in soft- and bio-matter. This school is aimed at graduate students and researchers in the fields of statistical mechanics, materials science, biophysics and nanobiotechnology.

Invited Lecturers:

Mathias Boström (University of Oslo, Norway)

Hofmeister effects, Van der Waals forces and modeling of cellulose in solution

Hernan Chaimovich (USP-São Paulo, Brazil)

Trifluoromethane sulfonate as a surfactant counterion: properties and applications

Ralf Eichhorn (Nordita, Sweden)

Theory of phoretic effects induced by the (counter-)ions in the system

Rosângela Itri (USP-São Paulo, Brazil)

Protein interactions as revealed by small-angle x-ray scattering

Yan Levin (UFRGS, Brazil)

Introduction to statistical mechanics of charged systems

João Ruggiero Neto (UNESP-Rio Preto, Brazil)

Electrostatic and non-electrostatic features in the interaction of lytic peptides with model membranes

Organizers / Lecturers:

Fernando Luís Barroso da Silva (USP-Ribeirão Preto, Brazil)

On the peculiar electrostatic effects observed in protein systems – a computational approach

Roland Netz (Freie Universität Berlin, Germany)

Hydration and dielectric effects at surfaces

Rudolf Podgornik (U. Ljubljana, Slovenia)

Charge regulation and electrostatic interactions in proteins

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

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

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

The application deadline is **January 05, 2015**



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