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School/Tutorial

Summer School on Quantum and Kinetic Theory for Complex Systems

Jun 13 - 17, 2016

Department of Mathematics, UCSB
Department of Mathematics

[UCSB Visitor Guide](#)

ABSTRACT

In this Summer School, held at UC Santa Barbara, we bring together experts in kinetic theory, quantum mechanics, and partial differential equations. The main topic of the discussion will be the modeling, analysis, and simulations of complex systems using quantum and kinetic theories. There will be four minicourses by the following speakers:

1. **Nicola Bellomo, Politecnico di Torino, Italy,** 'Toward a Mathematics for Living Systems'.
2. **Éric Cancès, CERMICS - Ecole Des Ponts, Paris, France,** ' Density Functional Theory: models and numerical methods'.
3. **Lenya Ryzhik, Stanford University, USA,** 'Transport in Random Media'.
4. **Luis Vega González, Universidad del País Vasco and Basque Center for Applied Mathematics, Bilbao, Spain,** 'Delta shell interactions for Dirac Hamiltonians'.

In addition there will be short seminars by both junior and senior researchers. We plan to have sufficient free time to foster discussion and facilitate new collaborations.

GOALS

The goal of this school is to provide introductory courses that will help achieve a solid mathematical foundation on a number of research areas including quantum mechanics, kinetic theory, and disordered systems.

REGISTRATION REQUESTED

Invited participants can RSVP and provide the additional requested information about their stay, including the title and abstract of proposed talks, **here**.

Applications for participation can be made through the Online Application. Due to space limitations, these requests are subject to approval by the organizers.

The registration deadline is April 20, 2016.

ORGANIZERS

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CONFIRMED PARTICIPANTS

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Yingwei Wang	Purdue University
Li Wang	SUNY Buffalo
Xu Yang	University of California, Santa Barbara
Yuhua Zhu	UW-Madison

FUNDING

A limited amount of travel and local lodging is available for researchers in the early stages of their career who want to attend the full program, especially for graduate students and post-doctoral fellows.

INFORMATION FOR PARTICIPANTS

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