INSTITUTE FOR PURE AND APPLIED MATHEMATICS



Putting the Theory Back in Density Functional Theory: A Summer School

Los Angeles, California

August 22-26, 2016

ORGANIZING COMMITTEE: Kieron Burke (University of California, Irvine), **Attila Cangi** (Max Planck Institute of Microstructure Physics), and **Hardy Gross** (Max Planck Institute of Microstructure Physics)

Scientific Overview

Last year, at least 30,000 scientific papers reported the results of DFT calculations. Many workshops and schools teach how to run a specific code. The purpose of this school is to teach the theory behind DFT. Lectures will be pedagogical and range from fundamentals (Hohenberg-Kohn theorem) to the latest approximations, and will help connect DFT to other areas of mathematics and theory.

The school is primarily targeted at junior researchers (Ph.D. students and postdocs) who are currently running DFT calculations and/or developing DFT or are interested in learning more about DFT. Internationally renowned experts in DFT will provide a thorough training in the fundamental theory through lectures and pedagogical research talks that connect themes of the lectures to the lecturers' own cutting-edge research. All participants are encouraged to submit an abstract to present a poster, and a limited number will be selected for oral presentations to the entire school.

Confirmed Speakers

Kieron Burke (University of California, Irvine), Attila Cangi (Max Planck Institute of Microstructure Physics), Carlos Garcia-Cervera (University of California, Santa Barbara), Paola Gori-Giorgi (Vrije Universiteit), Hardy Gross (Max Planck Institute of Microstructure Physics), Mel Levy (Tulane University), Jianfeng Lu (Duke University), Neepa Maitra (Hunter College, CUNY), John Perdew (Tulane University), Adrienn Ruzsinszky (Temple University), and Weitao Yang (Duke University).

Participation

Additional information about this workshop including links to register and to apply for funding, can be found on the webpage listed below. Encouraging the careers of women and minority mathematicians and scientists is an important component of IPAM's mission, and we welcome their applications.

Application

Deadline: May 1, 2016 Link: https://www.mathprograms.org/db/programs/418

www.ipam.ucla.edu/dft2016









