

INT Program INT13-2a

## **Advances in quantum Monte Carlo techniques for non-relativistic many-body systems**

July 15 - 19, 2013

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### **Monday, July 15, 2013**

#### **Room C421, Physics/Astronomy Tower**

- 9:55 am: Greetings and brief introduction
- 10:00 am: Malvin Kalos, Lawrence Livermore National Laboratory  
**"Fermion Monte Carlo"**

### **Tuesday, July 16, 2013**

#### **Room C421, Physics/Astronomy Tower**

- 10:00 am: David Ceperley, Univ of IL, Urbana-Champaign  
**"Restricted Path Integrals for Fermions"**
- 11:30 am: Alessandro Roggero, Univ of Trento  
**"Dynamical Structure Factors from Quantum Monte Carlo Calculations of a Proper Integral Transform"**

### **Wednesday, July 17, 2013**

#### **Room C421, Physics/Astronomy Tower**

- 10:00 am: Aurel Bulgac, Univ of Washington  
**"Fermions in the unitary regime at finite temperatures"**
- 11:30 am: Ethan Brown, Univ of IL/LLNL  
**"Path-Integral Monte Carlo Methods for the Homogeneous Electron Gas"**

### **Thursday, July 18, 2013**

#### **Room C421, Physics/Astronomy Tower**

- 10:00 am: Philippe de Forcrand, ETH Zurich  
**"The sign problem in lattice QCD"**
- 11:30 am: Sebastiano Pilati, ICTP  
**"Ultracold atoms in optical lattices: beyond the Hubbard model"**

### **Friday, July 19, 2013**

#### **Room C421, Physics/Astronomy Tower**

- 10:00 am: Alessandro Lovato, Argonne National Laboratory  
**"Charge form factor and sum rules of electromagnetic response functions in Carbon-12"**

Please send your talks to [janine@phys.washington.edu](mailto:janine@phys.washington.edu) or bring them to me in C411.

**INT Program INT13-2a Participants July 15-19, 2013**

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**Please send a .pdf or .ppt of your presentation to [janine@phys.washington.edu](mailto:janine@phys.washington.edu) or bring it to me in C411. Thanks!**