

International Focus Workshop on Quantum Fluid Clusters (QFC 09)

May 25 - 27, 2009

Scientific coordination:

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Organisation:

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Helium droplets offer the unique opportunity to study the properties of quantum many-body objects. Moreover, atoms, molecules and clusters show a number of unusual features when embedded in helium droplets due to the peculiar nature of the quantum solvent. Helium nanodroplet isolation spectroscopy allows to determine the low temperature properties of stable complexes as well as fragile transient species. Even the dynamics of chemical reactions in the ultracold and quantum environment can be studied. Finally, studies on hydrogen clusters have recently been pushed forward, offering an alternative quantum system showing remarkable properties.

The purpose of the workshop is to bring together scientists working on the field of quantum fluid clusters and further aspects of superfluidity in finite systems. The workshop series on Quantum Fluid Clusters started in 1989 in Trento (Italy), continued 1994, 1997 and 2000 at Schloss Ringberg (Germany), 2002 in Trento (Italy), and 2005 in Bad Honnef (Germany).

Main topics:

- Structure and elementary excitations of quantum fluid clusters
- Spectroscopy of atoms, molecules and clusters isolated in quantum clusters
- Low temperature nanoscale chemistry
- Quantum fluids in confined dimensions

Invited speakers:

Manuel Barranco (Barcelona)

Massimo Boninsegni (Edmonton)

Marcel Drabbels (Lausanne)

Andrew Ellis (Leicester)

Wolfgang Ernst (Graz)

Franco Gianturco (Rome)

Martina Havenith (Bochum)

Wolfgang Jäger (Edmonton)

Joshua Jortner (Tel Aviv)

Kevin Lehman (Charlottesville)

Karl-Heinz Meiwes-Broer (Rostock)

Takamasa Momose (Vancouver)

Marcel Mudrich (Freiburg)

Dan Neumark (Berkeley)

Paul Scheier (Innsbruck)

Peter Toennies (Göttingen)

Andrej Vilesov (Los Angeles)

Applications are welcome and should be made by using the application form on the workshop web page (please see URL below). The number of attendees is limited. The **registration fee** for the workshop is **50 €** and should be paid by all participants. Costs for accommodation and meals will be covered by the Max Planck Institute. Limited funding is available to partially cover travel expenses. Please note that childcare is available upon request.

Deadline for registration is January 30, 2009.



For further information please contact:
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