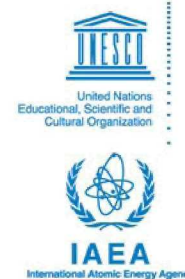




The Abdus Salam  
International Centre for Theoretical Physics



## Conference on Research Frontiers in Ultra-Cold Atoms

4 - 8 May 2009  
ICTP, Miramare, Trieste

co-sponsored by  
MIT-Harvard Center for Ultracold Atoms (CUA)

The Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste, Italy, is organizing a **Conference on Research Frontiers in Ultra-Cold Atoms, to take place from 4 to 8 May 2009.**

The aim of this Conference is to bring together scientists from all over the world to discuss the current frontiers of research in ultra-cold atoms. In particular, the programme will focus on the analysis of novel quantum phases and non-equilibrium phenomena that have direct connection to problems found in condensed matter physics, astrophysics and nuclear physics. The connections to condensed matter physics are particularly strong in the case of optical lattices, where ultra-cold atoms can simulate many known condensed matter phenomena with unprecedented control. In addition, ultra-cold atoms can reveal completely new phenomena which are not possible to realize in standard condensed-matter systems, since interactions, hopping, dimensionality, and temperatures can be fully controlled in the atomic systems.

The Conference programme will also include poster sessions. For those interested in presenting a poster contribution, kindly submit a one-page abstract (size A4) attached to the application form. File attachments should be in PDF format.

### Topics include:

- **Fermionic atoms in traps and optical lattices**
- **Bosonic atoms in traps and optical lattices**
- **Mixtures of bosons and/or fermions in traps and optical lattices**

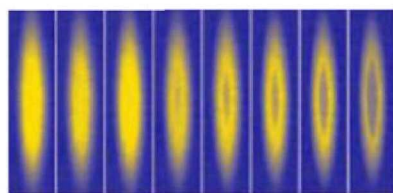
### PARTICIPATION

Scientists and students from all countries that are members of the United Nations, UNESCO or IAEA may attend the activity. As it will be conducted in English, participants must have an adequate working knowledge of this language. Although the main purpose of the Centre is to help researchers from developing countries through a programme of training activities within a framework of international cooperation, a limited number of students and post-doctoral scientists from developed countries are also welcome to attend.

As a rule, travel and subsistence expenses of the participants are borne by their home institutions. Every effort should be made by candidates to secure support for their fare (or at least half-fare). However, limited funds are available for some participants, who are nationals of, and working in, a developing country, and who are not more than 45 years old. Such support is available only to those attending the entire activity. There is no registration fee for attending the activity.

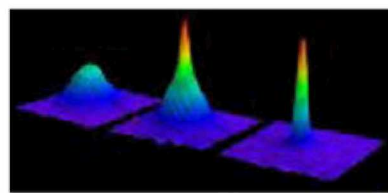
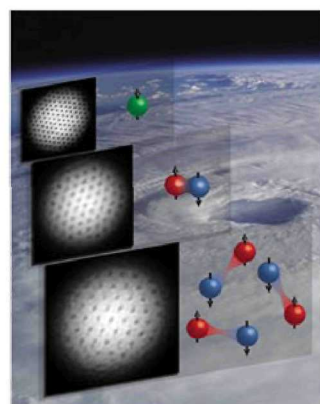
### HOW TO APPLY FOR PARTICIPATION

The application form can be accessed at the activity: <http://agenda.ictp.it/smr.php?2030>. Once in the website, comprehensive instructions will guide you step-by-step, on how to fill out and submit the application form. Deadline: **15 December 2008**



Activity Secretariat:

Telephone: +39-040-2240305  
E-mail: [smr2030@ictp.it](mailto:smr2030@ictp.it)



Telefax: +39-040-224163  
ICTP Home Page:  
<http://www.ictp.it>

(Trieste, updated March 2009)



### ORGANIZERS:

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(Academia Sinica, Taipei, Taiwan, China)

### LOCAL ORGANIZER

**Mikhail KISELEV**  
(ICTP, Trieste, Italy)

### INVITED SPEAKERS

**BAGNATO, Vanderlei** (Sao Paulo, Brazil)  
**BONGS, Kai** (Birmingham, UK)  
**BOUCHOULE, Isabelle** (CFL, France)  
**BOUYER, Philippe** (Palaiseau, France)  
**CHEVY, Frederic** (KBL, France)  
**DEMLER, Eugene** (Harvard, USA)  
**DIECKMANN, Kai** (LMU, Germany)  
**ESSLINGER, Tilman** (ETH, Zurich)  
**FORBES, Michael** (Los Alamos, USA)  
**GIORGINI, Stefano** (Trento, Italy)  
**HADZIBABIC, Zoran** (Cambridge, UK)  
**HAQUE, Masud** (MPI-Dresden, Germany)  
**HO, Jason** (Ohio State, USA)  
**HOFSTETTER, Walter** (JWGU, Germany)  
**KOHL, Michael** (Cambridge, UK)  
**LEGGETT, Anthony J.** (UIUC, USA)  
**LOEW, Robert** (Stuttgart, Germany)  
**MODUGNO, Giovanni** (LENS, Italy)  
**MUELLER, Erich** (Cornell, USA)  
**MUKAIYAMA, Takashi** (ERATO, Japan)  
**MURCH, Kater** (Berkeley, USA)  
**OBERTHALER, Markus** (D-Heidelberg)  
**OSPELKAUS, Silke** (JILA, USA)  
**PETROV, Dmitry** (Paris-Sud, France)  
**RIOU, Jean Felix** (Penn State, USA)  
**SALOMON, Christophe** (KBL, France)  
**SCHRECK, Florian** (Innsbruck, Austria)  
**SHLYAPNIKOV, Gora** (Paris-Sud, France)  
**SPIELMAN, Ian** (NIST, USA)  
**STRINATI, Giancarlo** (Camerino, Italy)  
**STRINGARI, Sandro** (Trento, Italy)  
**TAKAHASHI, Yoshiro** (Kyoto, Japan)  
**ZHANG, Wei** (Renmin, China)  
**ZWIERLEIN, Martin** (MIT, USA)

**DEADLINE**  
**for requesting participation**  
**15 December 2008**