

Introductory Course on Quantum Information and Quantum Gases

**Innsbruck, 06-08 July 2010, including a colloquium of the Innsbruck-Vienna SFB
“Foundations and Applications of Quantum Science”, 08 July 2010.**

Organizers:

Rudolf Grimm and Klemens Hammerer (University and IQOQI Innsbruck).

Secretary: Sabine Hofer Brigo, sp-physik@uibk.ac.at

Scope of the Course

The short course on 06-08 July 2010 will give a basic introduction into two fascinating fields in research on modern quantum physics (quantum information and ultracold quantum gases), which offer many exciting research opportunities for young researchers. The course is addressed to students shortly after their BSc degree (or typically after three years of diploma studies) and does not require any special knowledge on the field besides basic knowledge of quantum physics and atomic, molecular, and optical physics.

Program

Fourteen lectures given by experts from Innsbruck and Vienna will cover the main topics such as basic concepts of quantum information, implementations of quantum information processing in various systems, Bose-Einstein condensation, ultracold molecules, and physics with atom chips. In addition, students will be given the opportunity to visit state-of-the-art laboratories at the University of Innsbruck and the Institute of Quantum Optics and Quantum Information.

On 08 July, participants of the school are invited to attend a colloquium where further overviews of the SFB research will be presented.

Participants

In addition to students from the three member universities of the SFB (Univ. Innsbruck, Univ. Vienna, and Univ. of Technology Vienna) we invite external students to participate. The Innsbruck Physics Research Center will be able to sponsor the participation of about 20 external students, covering their travel and local expenses.

Application

Please fill in the attached form and return it to us (sp-physik@uibk.ac.at) before the application deadline of 15 June 2010. The applicants are requested to arrange for a recommendation letter to be sent to us by e-mail by professors from their home universities. Applications will be notified on their acceptance no later than 22 June 2010.

Introductory Course on Quantum Information and Quantum Gases

Innsbruck, 06-08 July 2010, including a colloquium of the Innsbruck-Vienna SFB
“Foundations and Applications of Quantum Science”, 08 July 2010.

Organizers: Rudolf Grimm and Klemens Hammerer (University and IQOQI Innsbruck).

Application form (to be sent by 15 June 10)

Surname:

First name:

Home address:

E-mail address:

University:

Begin of physics studies (which year):

BSc degree (date or expected date):

if applicable, otherwise give date of pre-diploma or other exams

Diploma or Master Thesis,

starting date or expected starting date:

Name of recommending professor:

arrange for a recommendation letter to be sent
to sp-physik@uibk.ac.at by 15 June 2010

Travel support requested (yes/no):

max. of 200€ available for each external participant

Departure date (default is Fri, 9 July):

Arrival date is Mon, 5 July for all external participants

----- date and signature

Please send your application to the

Innsbruck Physics Research Center, Univ. of Innsbruck, Attn.: Ms. Sabine Hofer Brigo
sp-physik@uibk.ac.at or Fax +43 512 507 2921