

ICTP-NCNST-ICTS Asian/Pacific Regional College on: "Science at the Nanoscale"

14 - 25 August 2006

Beijing, P.R. China

A regional college on science at the nanoscale will be held at the ICTS - Interdisciplinary Center of Theoretical Studies of the Chinese Academy of Sciences in Beijing from 14 to 25 August 2006. The College will be jointly sponsored by the Abdus Salam International Centre for Theoretical Physics (ICTP), the National Center of Nanoscience and Nanotechnology of China (NCNNC) and the Interdisciplinary Center of Theoretical Studies (ICTS). The directors are: Ralph Gebauer (ICTP, Trieste), Lu Zhong-yi (ITP, Beijing), Giacinto Scoles (Princeton University and SISSA/ELETTRA, Trieste), Xie Sishen (NCNNC, Beijing), and Yu Lu (ICTS, Beijing).

In recent years it has become possible to manipulate matter at an atomistic scale. The research into ways to perform such manipulations and to carry out measurements, as well as the attempts to understand the basic physics underlying the observed phenomena, have rapidly grown into a very active interdisciplinary scientific domain. Today, research on nanoscale phenomena is strongly supported in most developed countries due to the important benefits expected from the introduction of nanoscale devices in technological areas such as electronics, micromechanics and biomedicine. However, progress in these areas is necessarily linked to advances in the comprehension of the fundamental physical processes taking place at the nanoscale, as well as to cross-disciplinary efforts aimed at unifying languages and concepts from chemistry, materials science and condensed matter physics and various fields of engineering. In this respect, nanoscale phenomena represent an ideal bench for the development of new concepts and new trends in basic science.

The field of nanoscience is evolving so rapidly, that the gap between achievements in basic research and technological applications has shrunk considerably. It is, therefore, very desirable to bring researchers from developing countries in contact with this domain of science and stimulate them to be an active part of this field. Making this kind of contact possible is the main target of the College. Furthermore, research in nanoscience is not too expensive, and its dependence on the skills of people, and not necessarily on large infrastructures, makes this field particularly suitable for trying to reduce the technological gap between underdeveloped and developed countries.

The College is aimed for students and young researchers from the East Asian/Pacific region.

A tentative list of speakers and lecturers includes:

Boris Altshuler (Princeton University, USA)
Julio Fernandez (Columbia University, USA)
Philip Kim (Columbia University, USA)
Uzi Landman (Georgia Institute of Technology, USA)
Gang-Yu Liu* (University of California, Davis, USA)
Nicola Marzari (Massachusetts Institute of Technology, USA)
Abraham Nitzan (Tel Aviv University, Israel)
Sandro Scandolo (ICTP, Italy)
Wolf-Dieter Schneider (Ecole Polytechnique Fédérale de Lausanne, Switzerland)
Uri Sivan (Technion, Israel)
Francesco Stellacci (Massachusetts Institute of Technology, USA)
Erio Tosatti* (SISSA-International School for Advanced Studies, Italy)
Xin-Cheng Xie (Institute of Physics, CAS, China)
Hou-Zhi Zheng (Institute of Semiconductors, CAS, China)
Xiaoyang Zhu (University of Minnesota, USA)

(* = to be confirmed)

PARTICIPATION

For applicants from mainland China: The applicants should consult the webpage: <http://www.icts.cn/science/college060814.htm> (which will be constantly updated), and submit applications on-line. For any queries please consult the secretariat: Ms. Hui Tang, Interdisciplinary Center of Theoretical Studies, CAS, #55 Zhong Guan Cun Dong Lu, P.O. Box 2735, 100080 Beijing, China (tel. +86-10-82640456 - fax +86-10-82640409 - icts@itp.ac.cn). ICTS Home Page: <http://www.icts.cn/>
For applicants from all other countries/regions: The Application Form can be downloaded from the activity's Web page below, which will be constantly updated. The form should be completed and returned hard copy (not via e-mail) to: The Abdus Salam International Centre for Theoretical Physics (smr.1785), Strada Costiera 11, 34014 Trieste, Italy.
Tel. +39-040-2240111 - fax +39-040-224163 - e-mail: smr1785@ictp.it
ICTP Home Page: <http://www.ictp.it/>

The deadline for receipt of applications is: 30 April 2006

http://cdsagenda5.ictp.trieste.it/full_display.php?smr=0&ida=a05256

IN COLLABORATION WITH

**NCNST -
National Center of Nanoscience and
Nanotechnology of China**

**ICTS -
Interdisciplinary Center of
Theoretical Studies, Chinese Academy
of Sciences (CAS)**

CO-SPONSORED BY:

**NSFC - National Science Foundation of
China**

DIRECTORS

R. Gebauer (ICTP, Trieste)
G. Scoles (Princeton University and
SISSA/ELETTRA, Trieste)
XIE Sishen (NCNNC, Beijing)
YU Lu (ICTS, Beijing)

LOCAL ORGANIZER

LU Zhong-yi (ITP, Beijing)

DEADLINE

for requesting participation

30 April 2006

