SUMMER SCHOOL AND CONFERENCE ON AUTOMORPHIC FORMS AND SHIMURA VARIETIES
(UPDATED)

School: 9 - 22 July 2007
Conference: 23 - 27 July 2007

ICTP, Miramare - Trieste, Italy

The Abdus Salam International Centre for Theoretical Physics (ICTP) is organizing a Summer School and Conference on Automorphic Forms and Shimura Varieties from 9 to 27 July 2007. The activity will be directed by Ngô Bao Chau (Université de Paris-Sud, Orsay, France) and Dipendra Prasad (Tata Institute, Mumbai, India). The Conference is organized jointly with Laurent Fargues (CNRS, Paris-Sud, France).

Automorphic forms and Shimura varieties lie at the crossroads of number theory, representation theory and algebraic geometry. Deep conjectures of Langlands provide a unifying vision for the three areas. The aim of the School and the Conference will be to introduce young mathematicians from developing countries (and elsewhere) to fundamental techniques and recent developments in the field.

The School will be organized in eleven mini-courses:

Harmonic analysis on the adeles - Tate's thesis (D. Prasad, Tata Institute)
Local representation theory (G. Henniart, Université Paris-Sud)
Automorphic forms on GL(2) (A. Nair, Tata Institute)
Analytic theory of L-functions (C.S. Rajan, Tata Institute)
Modular curves (B. Edixhoven, Leiden)
Introduction to the trace formula (P.-H. Chaudouard, Université Paris-Sud)
Points on Shimura varieties (L. Fargues, Université Paris-Sud)
Cohomology of Shimura varieties (T.N. Venkataramana, Tata Institute)
The Langlands correspondence over function fields (B.C. Ngô, Université Paris-Sud)
On Langlands functoriality: constructive method (D.H. Jiang, University of Minnesota)
Leaves on Shimura varieties (C.F. Yu, Academia Sinica)

The tentative list of speakers of the **third week**'s Conference, from 23 to 27 July 2007, includes:
Anandavardhanan*, M. Bertolini, P. Boyer, P.-H. Chaudouard, J. F. Dat, L. Fargues, U. Goertz, M. Harris*, G. Henniart, D.H. Jiang, W. Luo, E. Mantovan*, S. Morel, A. Nair, A. Pal, C.S. Rajan, M. Strauch, T.N. Venkataramana, E. Viehman, S. Wang*, D. Whitehouse, C.F. Yu.

* (to be confirmed)

Mathematicians from all countries that are members of the UN, UNESCO or IAEA may attend the School. The main purpose of the ICTP is to help researchers from developing countries through a programme of training activities within a framework international co-operation. However, students and post-doctoral scientists from developed countries are also welcome to attend. As the School will be conducted in English, participants should have an adequate working knowledge of that language.

Limited funds are available for some research workers who are nationals of, and working in, a developing country. As scarcity of funds allows travel to be granted only in a few exceptonal cases, every effort should be made by candidates to secure support for their fares (or at least half fare) from their home country. Such support is available only for those who attend the entire activity. There is no registration fee.
The closing date for the receipt of requests for participation is January 15, 2007.
Candidates should complete, sign and return the **Application Form** obtainable through the ICTP WWW Server from the activity's Web Page, which will be constantly updated:
http://agenda.ictp.it/smr.php?1852

The Application form should be sent to:

The Abdus Salam International Centre for Theoretical Physics
Summer School and Conference on Automorphic forms and Shimura Varieties (smr1852)
c/o Ms. K. Mabilo
Strada Costiera 11, I-34014 Trieste, Italy
or
smr1852@ictp.it (please save and send file attachments in PDF)

Telephone: +39-040-2240-455   Telefax: +39-040-2240-490
E-mail: **smr1852@ictp.it**
ICTP Home Page: **http://www.ictp.it/**

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LOCAL ORGANIZER
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LECTURERS
will include

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B. Edixhoven
Leiden University, The Netherlands

L. Fargues
Paris-Sud, Orsay, France

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Academia Sinica, Taiwan

DEADLINE for receipt of applications:

January 15, 2007