





The Abdus Salam International Centre for Theoretical Physics (ICTP), in collaboration with the International School for Advanced Studies (SISSA) and the Italian Institute for Nuclear Physics (INFN), will hold a

# SUMMER SCHOOL on PARTICLE PHYSICS in the LHC ERA

15 - 26 June 2009

Miramare, Trieste, Italy

The purpose of this School is to give a detailed overview of the field of particle physics with its achievements and problems. The School will cover the most important and perspective areas in connection to the forthcoming results from the LHC.

# **TOPICS**

- \* LHC: Collider, Detector, Status
- \* Introduction to Collider Phenomenology
- \* Higgs Boson and Electroweak Symmetry Breaking
- \* B Physics and CP Violation
- \* Supersymmetry
- \* Physics of Extra Dimensions
- \* Astroparticle Physics
- \* Neutrino Physics

# **PARTICIPATION**

Scientists and students from all countries which are members of the United Nations, UNESCO or IAEA may attend. As a rule, travel and subsistence expenses of the participants should be borne by the home institution. 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 for those who attend the entire activity. There is no registration fee to be paid.

The **Application Form** can be accessed at the activity website: <a href="http://agenda.ictp.it/smr.php?2043">http://agenda.ictp.it/smr.php?2043</a> (which will be constantly up-dated). Once in the website, comprehensive instructions will guide you step-by-step, on how to fill out and submit the application form.

### Activity Secretary:

Summer School on Particle Physics in the LHC Era

(smr 2043 - c/o Ms. Rosanna Sain) the Abdus Salam International Centre for Theoretical Physics Strada Costiera 11, 34014 Trieste, Italy.

# **LECTURERS:**

Cedric DEFFAYET
(APC, Paris)

Daniel DENEGRI \*
(DSM / DAPNIA, CEA / Saclay)

Tao HAN
(Wisconsin University)

Konstantin MATCHEV
(Florida University)

Alex POMAROL
(Barcelona University)

Luca SILVESTRINI (INFN, Rome)

**Todor STANEV**(Bartol Research Institute)

Francesco VISSANI (INFN, Gran Sasso)

\* To be confirmed

### **ORGANIZERS**:

Bobby ACHARYA (ICTP)

Georgi DVALI (New York Univ.)

Gino ISIDORI (INFN, Frascati)

Goran SENJANOVIC (ICTP)

Alexei Yu. SMIRNOV (ICTP)

Scientific Secretary:

Koji TSUMURA (ICTP)

**DEADLINE** 

for requesting participation

13 March 2009