CERN Colloquium

SPEAKER: Prof. Chen HESHENG (director of the Institute of High Energy Physics, Beijing, China)

TITLE: **Prospect of Particle Physics in China**

DATE: Thu 25/09/2008 16:30

PLACE: Main Auditorium**

ABSTRACT

The Beijing Electron Positron Collider (BEPC) finished its running July 2005, with great success in both the Tau-Charm physics experiment and the synchrotron radiation light source. The latest Charm physics results from BEPC are reviewed, including the observation of the new resonance of X1835 with a possible explanation of the PPbar bound state. The major upgrade of BEPC into a double ring collider, so called BEPCII, will increase its luminosity by two orders of magnitude. The physics window of BEPCII is mainly the precision measurements in the Charm physics and the search for new phenomena. The construction of BEPCII is finished. The tuning of the storage ring goes smoothly. The synchrotron radiation facility of BEPCII opened to users with high performance since the end of 2006. The new detector BESIII has been moved into the interaction region June, and the joint commissioning started. The non-accelerator experiments in China are promoted with great efforts, including the neutrino physics experiments, the cosmic ray measurements, and the particle astrophysics experiments in Space. The reactor neutrino experiment at Daya Bay could reach the sensitivity of 0.01 on the measurement of the neutrino mixing parameter $\sin^2 \theta_{13}$. The medium and long term plan of the Chinese particle physics experiments is also discussed.

Organised by: Luis ALVAREZ-GAUME / PH-TH ----------**

Tea and coffee will be served at 16:00