EP Seminar

SPEAKER: Stephan Paul (Technische Universitaet Muenchen (DE))

TITLE: **Precision spectroscopy at COMPASS: Observation of a new (exotic) light axial vector meson and a deeper look into decay dynamics**

DATE: Tue 10/12/2013 11:00

PLACE: Main Auditorium

ABSTRACT

The COMPASS experiment is studying diffractive meson production using a 190 GeV/c pion beam.
High statistical accuracy has triggered the development of innovative analysis schemes not possible in previous experiments and lead to the discovery of new hadronic states.
Among these is the observation of a new light (possibly exotic) axial vector meson, the interpretation of which is still open. In addition we have analyzed the pi-pi S-wave content in exclusive 3pi-events.

As a result of our analysis also the interpretation of resonance structures can now be clarified using the variation of production rates with the four momentum transfer, allowing to identify resonant and non-resonant components in the spectra.

In addition to the 3pi final states we will also give an overview on results obtained with other particles forming the final state and present an outlook on forthcoming results.

Organised by: M. Mangano, C. Lourenco, G. Unal.....
Tea and Coffee will be served at 10h30