Physics at the Large Hadron Collider

Seminar for the TU München, PD Dr. H. Kroha

Summer Semester 2008 MPP, room 104, Tuesdays 14:00 - 15:00 Start: 22.04.2008.

The topics are selected to cover the most interesting latest results of ATLAS CSC notes, with an emphasis on the LHC physics which can be performed with early data.

Speakers should also benefit from their talks:

- extend the knowledge related to their field of research and
- (for students) train their presentation skills.

Preliminary agenda, suggested topics:

- 1. Charged Higgs Boson Searches (Thies Ehrich, 29.04.)
- 2. Missing Energy and Tau-Lepton Reconstruction in ATLAS (Stefan Stonjek, 27.05.)
- 3. Statistical Meth. for Determining the Higgs Disc. Potential (Oliver Kortner 03.06.)
- 4. Incl. SUSY Searches and Data-Driven Background Estim. (Federica Legger, 17.06.)
- 5. Excl. SUSY Searches and Exotic Multilepton Final States (Joerg von Loeben, 24.06.)
- 6. Search for Higgs Boson Decays H->WW (Steffen Kaiser, 01.07.)
- 7. Production of Gauge Boson Pairs at the LHC (Daniela Rebuzzi, 15.07.)
- 8. Search for Higgs Boson Decays H->ZZ(*)->41 (Alessia D'Orazio, 22.07.)
- 9. Jet Energy Calibration in ATLAS (Andreas Jantsch, 29.07.)
- 10. W/Z(+jets) cross-section measurement (Sandra Horvat)
- 11. tt cross-section measurement (SCT?)
- 12. top mass measurement (SCT?)
- 13. Commissioning of the muon spectrometer (Bernhard Bittner?)
- 14. Theory