



Ústav částicové a jaderné fyziky MFF UK
Sekce fyziky elementárních částic FZÚ AV ČR, v.v.i.
Centrum částicové fyziky

Seminář

14. prosince 2011

Frank Simon (MPI Mnichov)

Precision and Discovery at the Terascale – Physics and Detectors at CLIC

In the coming years, Experiments at the Large Hadron Collider will give us a first impression of particle physics at the Terascale and might provide first answers to fundamental open questions. For a detailed exploration of physics in the TeV region and for the possibility for additional discoveries, the LHC should be complemented by a high energy lepton collider. The Compact Linear Collider CLIC is one of the options for such a future collider, and is capable of center of mass energies up to 3 TeV. This will provide the possibility for precision studies of standard model and new physics, and discovery potential beyond the LHC. To fully realize the potential of such a future collider, detector systems that go far beyond the current state of the art in key parameters are necessary. I will review the physics capabilities and the detector concepts at CLIC, highlighting selected physics studies and detector challenges, in particular in the area of event reconstruction in high background environments and imaging calorimetry for precise jet reconstruction.

Semináře se konají vždy **ve středu v 16.00 hod** v místnosti A945 na 9. patře katedrálního objektu, V Holešovičkách 2, Praha 8.

Další informace o seminářích na <http://www-ucjf.troja.mff.cuni.cz/>