First Biennial African School on Fundamental Physics and its Applications

Sunday, 1 August 2010 - Saturday, 21 August 2010 NITheP at Stellenbosch, South Africa

Scientific Programme

FIRST WEEK (2-6th august 2010)

Lectures and Discussion Sessions on the Theoretical aspects of:

- . Particle Physics
- . Nuclear Physics
- . Hot and Condensed Nuclear Matter
- . Astrophysics & Cosmology
- . Monte Carlo Generators

Computer Lab on MC Generators

SECOND WEEK (9-13th august 2010)

Lectures and Discussion Sessions on the Experimental aspects of:

- . Particle Physics
- . Nuclear Physics
- . Hot and Condensed Nuclear Matter
- . Astrophysics & Cosmology
- . Computing in HEP

Computer labs on introductions to ROOT and the GRID

THIRD WEEK (16-20th august 2010)

Lectures and Discussion Sessions on the Experimental aspects of:

- . Beam Optics
- . Accelerator Physics
- . Instrumentation
- . Laser Driven Plasma Accelerators
- . Magnetic Confinement Fusion
- . Medical Applications of Particle Beams

Practice labs on:

- . Particle Detectors
- . Laser Physics

Computer lab on GEANT4 (TBC)