

# **Second Biennial African School on Fundamental Physics and its Applications**

**Sunday 15 July 2012 - Wednesday 8 August 2012**

**Kumasi, Ghana**

## **Scientific Programme**

FIRST WEEK (16-20th July 2012)

Lectures and Discussion Sessions on the Theoretical aspects of:

- . Particle Physics
- . Nuclear Physics
- . Hot and Condensed Nuclear Matter
- . Astrophysics & Cosmology
- . Monte Carlo Generators
- . Computer labs on MC Generators

SECOND WEEK (23-27th July 2012)

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 intros to ROOT and the GRID

THIRD WEEK (30th July-3rd August 2012)

Lectures and Discussion Sessions on:

- . Beam Optics
- . Accelerator Physics
- . Instrumentation
- . Laser Driven Plasma Accelerators
- . Medical Applications of Particle Beams
- . Practice labs on: Particle Detectors, Laser Physics, Computer lab on GEANT4