Thursday, May 16th At 3:45pm



Giant resonances experiments with the K600 magnetic spectrometer of iThemba LABS

Abstract:

iThemba LABS near Cape Town, South Africa is home to the K200 Separated Sector Cyclotron, which is the most powerful accelerator in the southern hemisphere. This cyclotron produces beams ranging from light to heavy ions. The K600 Magnetic Spectrometer is high resolution kinematically corrected spectrometer used for the study of nuclear structure and reaction mechanisms at intermediate energies using light-ion projectiles. In particular, high energy-resolution inelastic scattering experiments on nuclei across the periodic table investigating the fine structure of giant resonances, with measurements at and near 0 degrees and the use of particle-gamma coincidence, present powerful tools to extract information about the dominant processes leading to equilibration. Past and current research into the ISGQR, IVGDR and ISGMR, as well as aspects of the future research programme designed to maximise the capability of this unique facilities, will be discussed.

CYCLOTRON COLLOQUIUM

Dr. Iyabo Usman

Senior Lecturer

Physics Department

University of

Witwatersrand in Johannesburg, South Africa

CYCLOTRON INSTITUTE

Room 228

Refreshments will be served at 3:30 pm

