



SPEAKER: Raimond Snellings (NIKHEF (NL))

TITLE: **Anisotropic flow at the LHC measured with the ALICE detector**

DATE: Tue 22/05/2012 11:00

PLACE: Main Auditorium

ABSTRACT

One of the fundamental questions in the field of subatomic physics is what happens to matter at extreme densities and temperatures as may have existed in the first instants after the Big Bang. The aim of ultrarelativistic heavy-ion physics is to collide nuclei at very high energies and thereby create such an extreme state of matter in the laboratory. Flow is an observable that provides experimental information on the equation of state and the transport properties of the created hot and dense system. The azimuthal anisotropy in particle production is the clearest experimental signature of collective flow in heavy-ion collisions. This so-called anisotropic flow is caused by the initial asymmetries in the geometry of the system. In this talk we will present the current ALICE anisotropic flow measurements for charged and identified particles and their implication for our understanding of the close-to-ideal fluid created in nucleus-nucleus collisions.