

LNGS SEMINAR SERIES

Vakhtang Kartvelishvili *Lancaster University*

Seminar I: "Quarkonium Physics at LHC"

An overview will be given of the programme studying heavy quark bound state production and properties with the ATLAS detector at LHC, with the emphasis on the fitting techniques and statistical methods used in the analyses. Topics include the measurement of J/psi and Upsilon production from various sources, as well as the measurements of the production of χ_c and $\psi(2S)$ states. A special attention will be given to the first discovery of the LHC -- the $\chi_b(3P)$ state, discovered in 2011.

Seminar II: "Higgs discovery and BSM searches at LHC"

After an introduction to the Standard Model Higgs boson properties and expected production characteristics, an overview will be given of the Higgs boson observation and measurements in various decay modes, such as ZZ^* , $\gamma\text{-}\gamma$, $\tau^+\tau^-$ etc. Some examples of Beyond-the-Standard-Model searches will also be considered, and perspectives for Run II of the LHC will be discussed.

JULY 9 - 10, 2014 – 11:00 PM
LNGS - " B. PONTECORVO " ROOM