Contribution ID: **467** Type: **Invited Speaker / Conférencier invité**

Commissioning of the GlueX Experiment

Thursday 18 June 2015 08:45 (30 minutes)

The primary goal of the GlueX experiment is to conduct a definitive mapping of states in the light meson sector with an emphasis on searching for exotic hybrid mesons as evidence of gluonic excitations, in an effort to understand the phenomenon of confinement in Quantum Chromo Dynamics. The experiment, housed in the new Hall-D facility at Jefferson Lab following its accelerator upgrade to 12˜GeV, is now in its commissioning and calibration phase with data taking expected in 2016. The key features of this compelling physics program will be presented together with an overview of early performance of the detector systems, focusing on the electromagnetic barrel calorimeter (BCAL), built at the University of Regina. The BCAL is a "spaghetti calorimeter", consisting of layers of corrugated lead sheets, interleaved with planes of 1-mm-diameter, double-clad, scintillating fibres, bonded in the lead grooves using optical epoxy. The detector will consist of 48 trapezoidal modules and will be readout using 3,840 large-area Multi-Photon Pixel counter arrays.

Author: Prof. PAPANDREOU, Zisis (Uinversity of Regina)

Presenter: Prof. PAPANDREOU, Zisis (Uinversity of Regina)

Session Classification: R1-7 Hadronic Structure (DNP-DTP) / Structure hadronique (DPN-DPT)

Track Classification: Nuclear Physics / Physique nucléaire (DNP-DPN)