



INVITATION

GFA DIAGNOSTIC SEMINAR

Beam Instrumentation for Electron Ion Collider

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Date: **Monday, October 27th, 2014**

Seminar: **15:00 – 16:00 h**

Place: **WBGB/019**

Abstract:

The Electron Ion Collider (EIC) is a next generation accelerator complex being planned in the United States for the experimental nuclear Physics community. There are two competing plans on the table for the location of the EIC. It is envisioned to be the successor to the Continuous Electron Beam Accelerator Facility at Thomas Jefferson National Accelerator Facility (JLAB) or the Relativistic Heavy Ion Collider at the Brookhaven National Laboratory (BNL). Both the plans bring in unique new capabilities to investigate nuclear physics. The JLAB plan involves building a new hadron accelerator along with the existing electron accelerator whilst the BNL plan involves building a new electron accelerator on top of the existing hadron accelerator. Both the labs are supporting R & D efforts into developing the various aspects of the novel facilities. In this talk, we wish to elaborate on the unique capabilities PSI could lend towards the R & D efforts in the beam instrumentation sector for the EIC. Two of the vital beam instruments that need development are general purpose Beam Intensity Monitors (BIM) and interaction point Beam Luminosity Monitors (BLM), for both the electron and hadron beams. The various techniques that could be used to build suitable BLMs and BIMs for the EIC will be discussed.

Please contact Dr. Gian Luca Orlandi for details (4739)
