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Status of the BONuS12 Radial Time Projection Chamber

Thursday 25 May 2017 15:50 (20 minutes)

Part of the experimental program in Hall B of the Jefferson Lab, Virginia, USA is dedicated to studying neutron structure functions using deep inelastic scattering on nuclei. For this purpose, the BONuS12 experiment will detect low momentum recoil protons in coincidence with scattered electrons. The protons will be detected by a second-generation Radial Time Projection Chamber (RTPC) using triple GEM foils for amplification while the scattered electrons will be detected by the CLAS12 spectrometer installed in Hall B. I will present the status of the BONuS12 RTPC detector that will take data within the next 2 years. I will detail the main improvements made from the previous BONuS RTPC as well as the hardware and simulation developments currently ongoing.

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Session Classification: Related detector technologies (e.g. RPC's and TPC's) - 2 (Chair: Bernd Surrow)