Contribution ID: 9 Type: Oral presentation

Towards High Resolution Bulk Micromegas Detectors for Nuclear Physics Instruments.

Monday 22 May 2017 16:30 (20 minutes)

Emanuel Pollacco a , Rui De Oliveira b, Bertrand Mehl b, Olivier Pizzirusso b , Mariam Kebbiri a and Esther Ferrer Ribas a

- a) IRFU/SPhN & SEDI, CEA SAclay, 91191 Gif-sur-Yvette, France
- b) CERN MPGD lab. Section EP-DT-EF, CERN Meyrin,

Over the last five years we have been developing instruments based on Micro Pattern Gas Detectors, MPGD specifically designed for Astro and Nuclear Physics reactions and decay studies. Today a relatively large number of instruments have or are being build for this domain. To cover needs of these developments we have been developing Bulk Micromegas MPGD with enhanced in charge resolutions. Through surface treatment of the anode, use of conducting surface polished glass, use of electroformed meshes and detector design we have obtained detectors which approach theoretical limits. We will present preliminary results, applications for the different instruments and possible further developments in the use of glass based interfaces.

Authors: POLLACCO, Emanuel (IRFU CEA Saclay); DE OLIVEIRA, Rui (CERN); MEHL, Bertrand (CERN); PIZZIRUSSO, Olivier (CERN); FERRER RIBAS, Esther (DAPNIA, Saclay)

Presenter: POLLACCO, Emanuel (IRFU CEA Saclay)

Session Classification: MPGD detector technologies - 4 (Chair: Matt Posik)