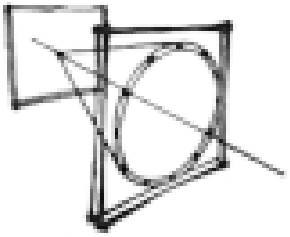

Contribution ID: **81** Type: **Poster**

MIP suppression with ThickGEM based Cherenkov detectors

Monday 5 September 2016 17:25 (15 minutes)

Micropattern Gaseous Detectors opened a novel way for
photon detection for RICH applications;
mostly using hole-type amplifiers like GEM and ThickGEM,
and hybrid structures based on the formers.
The main features are low ion backflow, high gain,
and possibility for suppressing the MIP signal.
Latter can enhance the dynamic range, and allow for high gain operation,
while using cost effective electronics.

A ThickGEM and wire chamber based hybrid was contructed,
and tested in particle beam for Cherenkov photon detection.
Its performance and main characteristics,
like high stabile gain, and small cluster size validated
its applicaiblity.

Systematic studies on the MIP suppression power
with the usage of ThickGEMs were carried out.
The dependence on field configuration
and applied ThichGEM-gain were measured and quantified.

The poster will focus on the detailed investigation of the latter,
while giving a brief description of the general performance
of the hybrid as a Cherenkov detector.

Registered

Yes

Primary authors: Dr VARGA, Dezso (Wigner RCP (Budapest)); Dr HAMAR, Gergo (Wigner RCP (Budapest), INFN Trieste (Trieste))

Presenter: Dr HAMAR, Gergo (Wigner RCP (Budapest), INFN Trieste (Trieste))

Session Classification: Poster Session B

Track Classification: Technological aspects and applications of Cherenkov detectors