Contribution ID: **22** Type: **Poster presentation**

Characteristics of Micromegas detectors at high temperature

Tuesday, 23 May 2017 15:12 (4 minutes)

The behaviour of two resistive-strip bulk micromegas detectors has been studied up to a temperature of approximately 50℃. A strong increase of the dark current is observed at temperatures in excess of 40 degrees. Measurements, keeping the the gas or detector temperature constant and varying the other, show that the increase of the dark current is primarily related to the temperature of the detector. The results of a dedicated study of the resistivity of the pillars material as a function of temperature and humidity explain the observed effects. In addition to these studies, results on the detector performance in terms of response, resolution, and efficiency as a function of temperature will be presented.

Primary author: LONGO, Luigi (Universita del Salento (IT))

Co-authors: IENGO, Paolo (CERN); SAMARATI, Jerome (CERN); WOTSCHACK, Joerg (Aristotle University of Thessaloníki (GR))

Presenter: LONGO, Luigi (Universita del Salento (IT))

Session Classification: Coffee Break and Poster Session - 1