



XLVII International Symposium on
Multiparticle Dynamics (ISMD2017)

September 11-15, 2017, Tlaxcala City, Mexico

Contribution ID : 28

Type : **not specified**

Four Channel Mini Wire Chamber to Study Cosmic Rays

Friday, 15 September 2017 17:20 (0:25)

Content

Resume. Multiwire proportional chamber is a conventional technique to study radiation in general, and cosmic rays in particular. To study cosmic rays, it was planned, designed, constructed, characterized, and tested a four channel mini wire chamber, based on two 3 cm X 3 cm X 0.6 cm Aluminum frames, two 3 cm X 3 cm X 0.6 cm plastic frames, two 3 cm X 3 cm X 0.3 cm Aluminum frames, two electronic planes each with two Tungsten Gold plated 1 mil diameter wires, parallel and 1 cm apart each other at 30 g stretched -each plane was 90o rotated each other in the final assemble- and two Aluminum foil window to define the gas volume; it was operated with Argon 90%-CH₄ 10% gas mixture at 1 atmosphere and ambient temperature (20oC in the average). It is presented technical details, results on characterization, and preliminary results on cosmic rays detection.

Session

Cosmic ray and astroparticle physics

Primary author(s) : Dr. FELIX, Julian (FERMILAB/Universidad de Guanajuato)

Co-author(s) : Mr. ARCEO, Luis (División de Ciencias e Ingenierías campus León - Universidad de Guanajuato); Mr. RODRÍGUEZ BECERRA, Gerardo de Jesús (División de Ciencias e Ingenierías, Universidad de Guanajuato)

Presenter(s) : Dr. FELIX, Julian (FERMILAB/Universidad de Guanajuato)

Session Classification : Cosmic ray and astroparticle physics (II)