



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 90° rotated each other in the final assemble and two Aluminum foil window to define the gas volume; it was operated with Argon 90%-CH<sub>4</sub> 10% gas mixture at 1 atmosphere and ambient temperature (20°C 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)