



Contribution ID: 53

Type: **not specified**

A Micromegas detector for ^{222}Rn emanations measurements

Monday 1 July 2013 16:45 (1h 10m)

The ^{222}Rn emanation has significant contribution in the overall background for rare event searches experiment, in order to measure this emanations a high sensitivity detector have been designed with the aim of a minimum detectable activity of $100\text{ }\mu\text{Bq}$. The detection method is the electrostatic collection of the ^{222}Rn daughters on a Micromegas detector. Using a chamber with a volume of 21.2 l for the collection of ^{218}Po and ^{214}Po progeny of ^{222}Rn and a $12 \times 12\text{ cm}^2$ pixelized Micromegas for the α detection. The advantages of the Micromegas detectors are the low intrinsic radioactivity and the track reconstruction of α 's, having excellent capabilities for event discrimination.

Presenter: GARCIA PASCUAL, Juan Antonio (Facultad de Ciencias-Universidad de Zaragoza)

Session Classification: Monday (poster session)