

NAME: **Ioannis Giomataris**

Email: Ioanis.Giomataris@cern.ch

AFFILIATION: SACLAY, Paris, France

TITLE: Search of rare events using gaseous detectors

ABSTRACT:

There is an increasing interest of massive low-background, low-energy threshold detectors in particle astrophysics for searching the origin of dark matter in our universe and studying low-energy neutrino physics. The use of a new generation of gaseous micropattern detectors seems to be a promising way to reach this goal.

The purpose of this presentation is to review new generation gaseous detectors and their ability to detect signature of such exotic particles :

- Directional dark matter detectors for WIMP search
- Low background detectors for axion search
- Low-energy neutrino detection