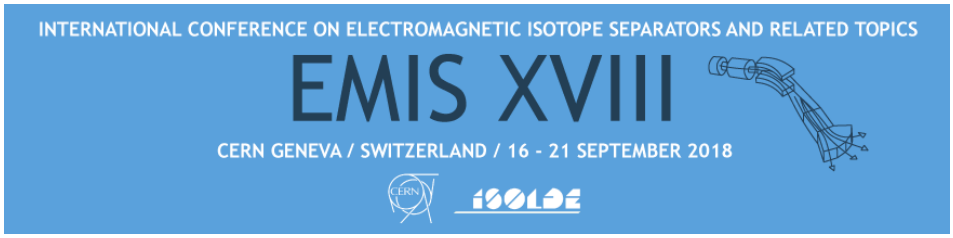

Contribution ID: **183** Type: **Poster**

Development of an Ba++ ion source for the Barium Tagging Program of the NEXT experiment

Monday, 17 September 2018 18:19 (1 minute)

Double beta decays in Xe-136 result in the production of a Barium ion. In gas phase it is expected that a Ba++ ions is produced. Tagging Ba++ becomes thus, an unmistakable signature of the decay and can lead to a background-free neutrinoless double beta decay experiment. In this poster a Ba++ ion source based on a fs laser is presented. Such a source can be used as a part of the Barium Tagging program of the NEXT experiment.

Primary authors: Dr GOMEZ CADENAS, Juan Jose (DIPC); Dr MONRABAL, Francesc (U. Texas at Arlington); Dr PERALTA, Alvaro; Dr SANCHEZ, Marina (CLPU)

Presenter: Dr GOMEZ CADENAS, Juan Jose (DIPC)

Session Classification: Poster Session 1