



Contribution ID: 15

Type: **not specified**

## **ACTAR TPC: a novel detection system for nuclear physics experiments [INVITED]**

*Thursday, 15 February 2018 19:15 (30 minutes)*

The Active Target and Time Projection Chamber (ACTAR TPC) is an ambitious European project whose goal is to design and construct a high-luminosity gas-filled detector to study reactions and decays of rare isotopes. The core detection system consists of a micro-pattern gaseous detector coupled to a highly pixelated pad plane with a pitch of only 2x2 mm<sup>2</sup>. Both the channel density (25 channels/cm<sup>2</sup>) and total number of channels (16384) are the highest that have been achieved by any nuclear physics detector to date. In this talk, I will provide an overview of the project, present new results from a recent commissioning experiment and describe the day one physics programs for ACTAR TPC when it goes online at the GANIL laboratory in France in 2018.

**Primary author:** Dr GRINYER, Geoffrey Fathom (University of Regina)

**Presenter:** Dr GRINYER, Geoffrey Fathom (University of Regina)

**Session Classification:** Session #1