



Contribution ID: 90

Type: Poster

A new CVD Diamond Mosaic-Detector for (n,a) Cross-Section Measurements at the n_TOF Experiment at CERN

At the n_TOF experiment at CERN a dedicated detector, which consists of an array of 9 sCVD diamond detectors, has been developed for (n,a) cross-section measurements. The detector has been characterized and a first cross-section measurement has been performed for the $^{59}\text{Ni}(n,a)^{56}\text{Fe}$ reaction in 2012. The characteristics of the detector, its performance during the cross-section measurement and preliminary results of the experiment will be presented.

CIVIDEC Instrumentation GmbH, Vienna, Austria, sponsored this work.

quote your primary experiment

n_TOF CERN

Authors: GUERRERO SANCHEZ, Carlos (CERN); WEISS, Christina (Vienna University of Technology (AT)); GRIES-MAYER, Erich (Vienna University of Technology (AT))

Co-author: COLLABORATION, The n_TOF (CERN)

Presenter: WEISS, Christina (Vienna University of Technology (AT))

Track Classification: Semiconductor Detectors