



NUSTAR Seminar

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Wednesday, April 03, 2019 at 14:30 p.m.

AP-Seminar Room SB3 2.283

Planckstraße 1, 64291 Darmstadt

“FATIMA, a fast timing array for the DeSpec experiment at FAIR”

Electronic timing using fast LaBr₃ scintillator detectors is a well established method for measuring half lives of excited states of atomic nuclei for many years.

FATIMA is an array of 36 LaBr detectors built for the DeSpec experiment at FAIR, to be used together with AIDA, DEGAS and a fast plastic scintillator for beta-gamma timing. The array has been set up for the first time at S4 last summer. This talk gives an introduction to FATIMA and presents results of first tests performed at GSI during the past months.

Before the array arrived at GSI, the detectors, along with other LaBr₃ detectors from the FATIMA collaboration, have been used in many experiments in different labs around the world. An overview of these activities will be given, along with an introduction to the method of fast timing itself.