

# *GSI - FAIR Colloquium*

*Main Lecture Hall (SB1 1.120), 64291 Darmstadt, Planckstraße 1*

*Tuesday, December 20, 2016,  
16:15 Uhr (Tea from 15:45)*

*GSI beam time 2016: NuSTAR  
Emma Haettner and Haik Simon - GSI*

*High precision experiments at low energy will be performed with the LEB of the Super-FRS at FAIR. Exotic nuclei produced and separated in-flight at high energy will be studied. A key instrument for these experiments is the Ion Catcher, a gas-filled cryogenic stopping cell in combination with a multiple reflection time-of-flight mass spectrometer. In this setup the exotic nuclei are stopped and thermalized, unambiguously identified, separated and extracted as a low energy beam of high phase-space density. This beam quality is well suited for precision measurements with traps. The Ion Catcher was successfully commissioned in several runs, especially during the 2016 beam time, at the FRS. New results and future prospects will be presented in this talk.*

*Einladender: Christoph Scheidenberger  
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