



Contribution ID: 4

Type: **Contributed talks**

## Electromagnetic detectors for experiments in heavy ion storage rings

*Tuesday, 29 June 2021 10:10 (20 minutes)*

Nuclear astrophysics studies on highly charged radionuclides benefit from accelerator facilities with storage rings, where exotic nuclides produced with small yields can be stored efficiently. Non-destructive detection methods are often used for in-flight measurements based on frequency analysis of the signal from the detector, leading to precision results for mass and lifetime of exotic nuclear species or isomeric states. The sensitivity of such detection systems is of primary importance, specially when the number of stored ions is small. Furthermore, since the exotic nuclides of interest are by nature short-lived, the detectors must be fast.

In this talk we would like to highlight some of the current activities and challenges with regard to the development and application of such detectors in past and future experiments in storage rings.

**Primary author:** Dr SANJARI, Shahab (GSI Darmstadt and Aachen University of Applied Sciences)

**Co-authors:** Mr DMYTRIIEV, Dmytro (GSI Darmstadt and University of Heidelberg); Prof. LITVINOV, Yuri A. (GSI Darmstadt and University of Heidelberg); Prof. STÖHLKER, Thomas (GSI Darmstadt, Helmholtz Institute Jena and University of Jena)

**Presenter:** Dr SANJARI, Shahab (GSI Darmstadt and Aachen University of Applied Sciences)

**Session Classification:** Session 4