

## **New capabilities of the ATLAS facility at Argonne**

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The ATLAS facility has recently seen a number of upgrades, both in terms of the accelerator and the associated instrumentation. The Argonne Gas-Filled Separator, AGFA, represents a new design for such separators that consists of only two magnetic elements allowing for a short ion trajectory from target to focal plane. It can be operated in stand-alone mode or in conjunction with GammSphere to study prompt gamma radiation emitted from products subsequently registered at the focal plane allowing for efficient study of the structure of trans-fermium nuclei. The AGFA separator is presently being commissioned and will soon be available for use in the research program. The Argonne In-Flight Radioactive Ion Separator, AIRIS, is a magnetic chicane that can separate in-flight produced radioactive beams from the primary beam and other reaction products. Since AIRIS is installed in the ATLAS, these radioactive beams can be transported to all downstream target stations. The commissioning of AIRIS is scheduled for the early summer 2018.

In this talk, I will review the anticipated physics impact and the status of these separators.

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