## **PANIC2021 Conference**



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## Experimental nuclear astrophysics overview

Friday 10 September 2021 13:30 (30 minutes)

If there is one thing we learned about the field of nuclear astrophysics in the last 10 years, it's that it is complicated business. While the original processes proposed already in the 1950s are still mostly valid and continue to exhibit important open questions, today we understand that other processes may have significant contributions. In particular, the production of heavy elements, which involves explosive nucleosynthesis processes, is one of the topics where major advances have been made in the last years. These advances are driven by new astronomical observations, sophisticated new astrophysical models, and new developments in radioactive ion beam facilities around the world.

In this talk I will present an overview of the field of nuclear astrophysics, focusing on the recent discoveries and current open questions especially from the experimental point of view. A particular focus will be on heavy element nucleosynthesis and on the new exciting opportunities that will soon be available at the Facility for Rare Isotope Beams (FRIB) at Michigan State University.

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