**Compound-Nuclear Reactions and Related Topics (CNR\*24)** 



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## Constraining and Calculating Nuclear Reactions on Unstable Fission Products

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Nuclear reactions on unstable fission products are of interest to nuclear non-proliferation efforts and basic science. While these reactions have historically been extremely difficult to measure, new experimental facilities are beginning to make beams of fission products available for the first time, enabling exciting experiments. The opening of this new area of the nuclear chart for measurements presents the opportunity to test, refine, and expand theories developed to explain behavior closer to stability, deepening our knowledge of the fundamental physics at play. We will present a summary of our white paper on the work needed, and the investments required to enable this work, to make measurements of nuclear reactions away from stability and the theoretical developments required to understand the underlying physics.

**Primary authors:** SWEET, Adriana (Lawrence Livermore National Laboratory); RICHARD, Andrea (Ohio University); RATKIEWICZ, Andrew (Lawrence Livermore National Laboratory); SPYROU, Artemis (Michgian State University/Facility for Rare Isotope Beams); ALAN, Barbara (Lawrence Livermore National Laboratory); MAT-TOON, Caleb (Lawrence Livermore National Laboratory); BLEUEL, Darren (Lawrence Livermore National Laboratory); POTEL, Gregory (Lawrence Livermore National Laboratory); ESCHER, Jutta (Lawrence Livermore National Laboratory); MUMPOWER, Matthew (Los Alamos National Laboratory); SCIELZO, Nicholas (Lawrence Livermore National Laboratory); Stephanie (Pacific Northwest National Laboratory); PAIN, Steven (Oak Ridge National Laboratory)

Presenter: RATKIEWICZ, Andrew (Lawrence Livermore National Laboratory)

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