



Physics Division Seminar

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Stellar Nucleosynthesis in the Lab

Host: Ben Kay

Monday, April 6, 2020 – 3:30 PM - Via BlueJeans

We will continue the Physics Division Seminar via BlueJeans. On Monday (4/6/20) slightly before 3:30 pm go to the meeting URL: <https://bluejeans.com/494035704>

Once logged in, you'll be given the option to use your computer for audio, or your phone for audio. Follow the instructions.

Abstract: This study of the origin of the elements requires understanding of nuclear reaction rates across the nuclear chart. Reactions on light, proton-rich nuclei dominate the nucleosynthesis and energy generation of explosive stellar binary systems like novae and x-ray bursts. Neutron captures play an integral role in the nucleosynthesis of neutron-rich stellar environments like supernovae and neutron star mergers. Other, rarer nuclei may be produced via the p-process, nu-p process, or even spallation reactions. To better understand these astrophysical processes and the nuclear reactions that power them, we study these reactions, either directly or indirectly, at various facilities worldwide. In this talk, I will present an overview of the experimental efforts being undertaken by our group to inform the nuclear reaction rates critical to our understanding of astrophysical events.