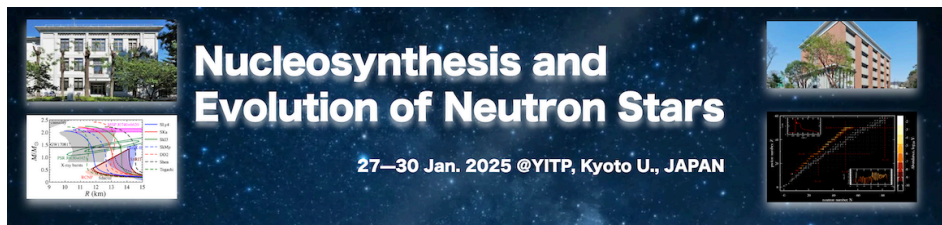


Nucleosynthesis and Evolution of Neutron Stars



Contribution ID: 53

Type: **Invited talk**

Nuclear reactions in accreting neutron stars at FRIB

Tuesday, January 28, 2025 10:10 AM (40 minutes)

Accreting neutron stars exhibit a broad range of nuclear reactions, from the rapid proton capture process in X-ray bursts at the surface to electron captures, neutron reactions, and fusion of neutron rich nuclei in the outer crust. These reactions give rise to a range of dynamic observables. At rare isotope beam facilities such as FRIB at MSU many of these reactions can now be studied. I will review the nuclear physics of accreting neutron stars, its link to observables, and results and prospects of experiments at FRIB to study these reactions.

Presenter: SCHATZ, Hendrik (Michigan State University)

Session Classification: Oral Presentation