

FRIB and the GW170817 Kilonova  
Facility for Rare Isotope Beams (FRIB), 1221B Conference Room  
23-27 July 2018  
AGENDA

Monday, 23 July 2018

09:00 am     *Registration and coffee*  
10:00 am     Welcome and logistics  
10:20 am     J. Barnes, Kilonova signatures and the r-process  
11:00 am     M. Eichler, Theoretical r-process sites and their signatures  
11:40 am     *Lunch*  
01:00 pm     Open work/discussion  
03:00 pm     *Break*  
03:30 pm     D. Siegel, GW170817: Implications for the astrophysical site of the r-process  
04:10 pm     L. Roberts, Nucleosynthesis and electromagnetic transients from binary neutron star mergers  
04:50 pm     *Adjourn*

Tuesday, 24 July 2018

09:00 am     C. Horowitz, Neutrino interactions in SN and nucleosynthesis  
09:40 am     S. Richers, Accurate neutrino transport in supernova and neutron star merger simulations  
10:20 am     *Break*  
10:40 am     A. Arcones, The r-process in supernovae and neutron star mergers  
11:20 am     S. Couch, Core-collapse supernovae as the initial conditions of neutron star mergers  
12:00 pm     *Lunch*  
01:00 pm     Open work/discussion  
03:00 pm     *Break*  
03:30 pm     F. Montes, Experimental charged-particle (a,n) reaction studies relevant for the weak r-process  
04:10 pm     G. Perdikakis, Neutron-induced reaction rates away from stability for astrophysics applications  
04:50 pm     *Adjourn*

Wednesday, 25 July 2018

09:00 am     O. Korobkin, Multiple facets of modeling GW170817 kilonova  
09:40 am     B. O'Shea, Predictive chemical evolution in the era of large surveys: challenges and opportunities  
10:20 am     *Break*  
10:40 am     B. Coté, Modeling the chemical evolution of r-process elements  
11:20 am     M. Mumpower, Nuclear fission properties for neutron star mergers  
12:00 pm     *Lunch*

01:30 pm FRIB tour (closed-toed shoes and covered legs required)  
03:00 pm *Break*  
03:30 pm Group discussion  
04:30 pm *Adjourn*  
06:00 pm *Group social dinner*

Thursday, 26 July 2018

09:00 am J. Cizewski, Surrogate neutron capture reaction prospects for r-process nuclei  
09:40 am A. Spyrou, Neutron capture reaction constraints for r-process  
10:20 am *Break*  
10:40 am A. Kankainen, Experiments for the r process at IGISOL  
11:20 am J. Clark, Examining r-process nucleosynthesis in neutron star mergers through mass measurements with the CPT  
12:00 pm *Lunch*  
01:00 pm Open work/discussion  
03:00 pm *Break*  
03:30 pm S. Naimi, The Rare-RI Ring ready to conquer terra incognita: mass measurement of r-process nuclei at RIKEN  
04:10 pm A. Kwiatkowski, Approaching the r-process path with precision mass spectrometry at TITAN  
04:50 pm *Adjourn*

Friday, 27 July 2018

09:00 am M. Brodeur, Future developments for high precision mass spectrometry to study the r-process  
09:40 am J. Engel, Beta decay for the r process  
10:20 am *Break*  
10:40 am E. Litvinova, Spectra from thermal relativistic nuclear field theory  
11:20 am C. Robin, Nuclear transitions for r-process studies in relativistic nuclear field theory  
12:00 pm *Lunch*  
01:00 pm Work on contributions to the deliverable  
03:00 pm *Break*  
03:30 pm Open work/discussion  
04:30 pm *Adjourn*