

Physics Division Seminar

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**Measurement of  ${}^7\text{Be}+d$  for Big-Bang  
Nucleosynthesis**

Host: Shaofei Zhu

**Monday, March 12, 2018 – 203, R150, 3:30 PM**

The cross sections of nuclear reactions between the radioactive isotope  ${}^7\text{Be}$  and deuterium, a possible path of reducing the production of mass-7 nuclides in Big-Bang nucleosynthesis, were measured at center-of-mass energies between 0.2 MeV and 1.5 MeV. The experiment with the ANASEN active-target detector system shows cross sections consistent with prior measurements at higher energies and an additional resonance at lower energy, inside the Gamow window. The implications for the primordial lithium problem will be discussed.