

Abstract Submitted  
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**Simulation of  $d(7\text{Be},t)6\text{Be}$  with Fresco, and investigation of resonant states of  $6\text{Be}$**  TIMOTHY PELHAM, ORNL, University of Rutgers, University of Surrey — An ongoing study is presented into the resonant states of  $6\text{Be}$  via simulation of  $d(7\text{Be},t)6\text{Be}$  with Fresco to investigate the results of “Searching for resonances in the unbound  $6\text{Be}$  nucleus” a paper by K.Y. Chae [1]. In this paper the  $d(7\text{Be},t)6\text{Be}$  reaction was studied to search for resonances in the  $6\text{Be}$  nucleus that may be used to increase our knowledge of the  $3\text{He}(3\text{He},2p)4\text{He}$  reaction. A 100-MeV  $7\text{Be}$  beam from the Holifield Radioactive Ion Beam Facility (HRIBF) was used to bombard  $\text{CD}_2$  targets, and tritons were detected by the Silicon Detector Array (SIDAR). It was concluded that a combination of reaction mechanisms are necessary to account for the observed triton energy spectrum. This will be further investigated by simulating the various reaction mechanisms with Fresco to try to reproduce and explain these results. Preliminary Results will be presented.

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