## Synthesis and Characterization of Epitaxial Actinide Heterostructures

Kevin D. Vallejo<sup>1</sup>, Brelon J. May<sup>1</sup>, Firoza Kabir<sup>1</sup>, Cody A. Dennett<sup>1</sup>, Paul J. Simmonds<sup>3</sup>, David H. Hurley<sup>1</sup>, Krzysztof Gofryk<sup>1</sup> <sup>1</sup>Idaho National Laboratory, Idaho Falls, ID, USA

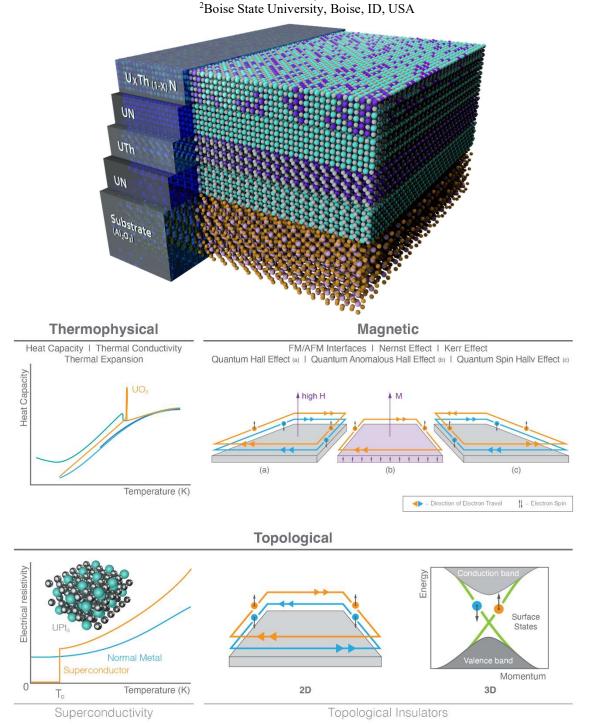


Figure 1 (top): Suggested structure for a heterointerface between UN and ThN grown epitaxially using molecular beam epitaxy. Figure 2 (bottom): Schematic of different physical properties proposed to be studied on epitaxial thin films of actinide materials.