## Abstract Submitted for the MAR14 Meeting of The American Physical Society

Valence and moment of Sm in SmB<sub>6</sub> under pressure NICHOLAS BUTCH, NIST Center for Neutron Research, JASON JEFFRIES, Lawrence Livermore National Laboratory, PAUL SYERS, JOHNPIERRE PAGLIONE, CNAM, University of Maryland, YUMING XIAO, PAUL CHOW, Carnegie Institute of Washington — We studied the valence and magnetic moment of Sm ions in the mixed-valent compound SmB<sub>6</sub> via x-ray spectroscopy. Using diamond anvil cells, the pressure dependence of these properties was measured to at least 20 GPa. We will discuss pressure-induced magnetic order in this compound, as well as ramifications for the sought-after ambient-pressure topological state.

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