## Magnetic properties in new half-Heusler-type compound Xin Gui<sup>1</sup>, Huibo Cao<sup>2</sup>, Robert Cava<sup>3</sup> <sup>1</sup>Princeton University <sup>2</sup>Oak Ridge National Lab, <sup>3</sup>Princeton University xgui@princeton.edu

Heusler and half-Heusler compounds were found to have intriguing properties including magnetic ordering, topological non-trivial state, superconductivity etc. Here we report the synthesis and crystal structure of a novel compound crystallizing in half-Heusler-type structure which was never disovered before. The new comopund paves a way to realize half-Heusler compounds and provides a new platform to investigate and tune physical properties in half-Heusler compounds.