

Abstract Submitted  
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**Effect of pressure on  $\text{CeGe}_{2-x}$  single crystals** S.L. BUD'KO, Ames Laboratory US DOE and Dept. of Physics and Astronomy, ISU, Ames, IA 50011, USA and SPSMS, UMR-E CEA/UJF-Grenoble 1, INAC, 38054 Grenoble, France, D. BRAITHWAITE, B. SALCE, SPSMS, UMR-E CEA/UJF-Grenoble 1, INAC, 38054 Grenoble, France, E. COLOMBIER, Ames Laboratory US DOE and Dept. of Physics and Astronomy, ISU, Ames, IA 50011, USA, M.S. TORIKACHVILI, Dept. of Physics and Astronomy, ISU, Ames, IA 50011, USA, and Dept. of Physics, SDSU, San Diego, CA 92182, USA, H. HODOVANETS, P.C. CANFIELD, Ames Laboratory US DOE and Dept. of Physics and Astronomy, ISU, Ames, IA 50011, USA — At ambient pressure  $\text{CeGe}_{2-x}$  has an antiferromagnetic (AFM) transition at  $T_N \sim 7$  K and, on further cooling, a second transition, to a weak ferromagnetic (WFM) state, at  $T_C \sim 4$  K. Under pressure the  $T_N$  goes through a broad maximum, and then is completely suppressed with a critical point at  $\sim 85$  kbar, grossly following the Kondo-necklace picture. The WFM phase evolves into apparent AFM phase under moderate pressure of  $\sim 10$  kbar, with  $T_{N1}$  joining  $T_N$  at  $\sim 60$  kbar. Resulting  $P - T$  phase diagram and comparison with  $\text{CeRu}_2\text{Ge}_2$  under pressure will be presented.

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