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Synthesis and properties of new U3TiSb5-type compounds[1] MAEGAN IDROGO, Texas Lutheran University, DANIEL JACKSON, DERRICK VANGENNEP, JAMES HAMLIN, University of Florida — Recently it was found that single crystals of Ce3TiSb5 exhibit a complex temperature/magnetic-field phase diagram with several metamagnetic transitions and a possible re-entrant disordered phase. In this presentation I will discuss our efforts to synthesis and characterize other members of the 3-1-5 family of compounds. In particular, we synthesizedsingle crystal of bothCe3ZrSb5and Pr3TiSb5using Sn flux growths.We find that Pr3TiSb5exhibits similar magnetic transitions at high field as Ce3TiSb5.

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