

Abstract Submitted  
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**Spin fluctuations and doping trends in the itinerant magnet  $\text{Pd}_2\text{TiIn}_x$**  JESSICA MISSAGHIAN, ANDREW LAFORGE, DAVID MATTHEWS, GARRETT ROGREN, ZACK SCHLESINGER, ARTHUR RAMIREZ, University of California, Santa Cruz — The intermetallic compound  $\text{Pd}_2\text{TiIn}$  is one of several Heusler-type materials which are remarkable for possessing a significant magnetic moment despite being composed of elements which have no spontaneous local moment. We investigate the nature of the magnetic order and the role of spin fluctuations by studying the magnetic, transport and heat capacity properties of two series of polycrystalline samples derived from  $\text{Pd}_2\text{TiIn}_x$ : one in which the indium content is varied from  $x = 0.87$  to  $1.22$ , and another in which 3d and 4d metals are substituted in small quantities for Pd and Ti.

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