

Abstract Submitted  
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**The superconducting phase and electronic excitations of (Rb,Cs)Fe<sub>2</sub>As<sub>2</sub>** J. KANTER, Lab. for Solid State Physics, ETH Zurich, CH-8093 Zurich, Z. SHERMADINI, R. KHASANOV, A. AMATO, Paul Scherrer Institute, CH-5232 Villigen PSI, Switzerland, Z. BUKOWSKI, B. BATLOGG, Lab. for Solid State Physics, ETH Zurich, CH-8093 Zurich — We present specific heat, transport and Muon-Spin Rotation ( $\mu$ SR) results on (Rb,Cs)Fe<sub>2</sub>As<sub>2</sub>. RbFe<sub>2</sub>As<sub>2</sub> was only recently found to be superconducting below 2.6 K by Bukowski et al. Compared to the related BaFe<sub>2</sub>As<sub>2</sub> the electron density is lower and no magnetic order is observed. For the superconducting phase the superfluid density was calculated from  $\mu$ SR data. The temperature dependence of the superfluid density and the magnetic penetration depth is well described by a multi-gap scenario. In addition the electronic contribution the specific heat was studied for different compositions and magnetic fields and reveals a high value for the Sommerfeld coefficient  $\gamma$ .

Jakob Kanter  
Lab. for Solid State Physics, ETH Zurich, CH-8093 Zurich

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