Point Contact Spectroscopy Study of the Heavy Fermion Superconductor $Pr(Os_{1-x}Ru_x)_4Sb_{12}$

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The recent discovery of superconductivity in the heavy fermion material $Pr(Os_{1-x}Ru_x)_4Sb_{12}$ has generated widespread interest. In particular, there is evidence for the existence of two competing superconducting order parameters, at least one of which is believed to have nodes. We have performed point-contact spectroscopy measurements on single crystals of $Pr(Os_{1-x}Ru_x)_4Sb_{12}$, using Pt-Ir tips in a dilution refrigerator with a pulsed technique to minimize Joule heating. We present differential conductance spectra down to 100 mK, along with the magnetic field evolution. We discuss the implications of our data in relation to recently proposed pairing symmetries.