

## High Resolution Thermometry for EXACT

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High Resolution Thermometers (HRTs) based on SQUID detection of the magnetization of a paramagnetic salt or a metal alloy has been commonly used for sub-nano Kelvin temperature resolution in low temperature physics experiments. The main applications to date have been for temperature ranges near the lambda point of  $^4\text{He}$  (2.177 K). These thermometers made use of materials such as  $\text{Cu}(\text{NH}_4)_2\text{Br}_4 \cdot 2\text{H}_2\text{O}$ ,  $\text{GdCl}_3$ , or  $\text{PdFe}$ . None of these materials are suitable for EXACT, which will explore the region of the  $^3\text{He}/^4\text{He}$  tricritical point at 0.87 K. The experiment requirements and properties of several candidate paramagnetic materials will be presented, as well as preliminary test results.