

## **A new SQUID-based magnetometer for temperatures below 1 K implementing an extended motion piezo-motor for the sample movement**

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Here we present a novel design of a magnetometer for a very low temperature environment below 1 K, intended to be used in dilution refrigerators. We have employed a piezo-motor with an extended range of motion (20 mm) for the movement of the sample through the pickup coils of the magnetometer. We have succeeded in thermally decoupling the piezo-motor from the mixing chamber and the sample.