

## **SQUID development for multiplexed cryogenic detectors**

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We are developing multiplexed SQUID readout techniques for multi-pixel focal plane arrays of Transition Edge Detectors. Space missions such as the sub-millimetre wave telescope SPICA and the X-ray telescope XEUS are targeted. We discuss design and experiments regarding the SQUID circuits with large signal bandwidth, high linearity, and low power dissipation at millikelvin temperatures, as required to implement the large Shannon capacity of the readout channel.