Kinetic Inductance Detectors for Space: SPACEKID perspective

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Abstract— **Due to their ease of multiplexing and high sensitivity Microwave kinetic inductor detectors (MKID) has become a detector of choice for ground based instruments which require large detector count. Major telescope cameras, like AMKID and NIKA, NIKA-2 has large MKID arrays implemented. MKIDs has also very good potential for being used as detectors for far infrared space mission. In order to address specific requirements associated with typical space conditions, i.e. low background power, cosmic ray sensitivity, frequency bands outside typical atmospheric transmission window a consortium of institutes (SPACEKIDS) has acquired European FP7 funding to develop and demonstrate KID technology for space. In this contribution we will present main specifications and requirements, mission concepts and also key results obtained by SPACEKID consortium so far, on its task do demonstrate MKID technology suitable for space.**