

Internship in SRON

Kinetic Inductance Detectors (KIDs) are emerging as promising candidates for various applications due to their high sensitivity, low noise, and compatibility with large-scale focal plane arrays. They have shown great potential in astrophysical observations, particularly in the far-infrared and submillimeter wavelength ranges. However, their application in space missions presents unique challenges that require tailored solutions.

The internship is focused on development activities related to KID detectors, providing students with the opportunity to participate in hands-on research and development activities for space applications. Three project proposals are available:

1. Design a Wide-band Flat-Gain RF Amplifier from 4 to 8 GHz, 20 dB Gain (1 dB gain accuracy), 15 dBm.
2. Design several types of Low-Loss Microstrip RF filters at 8 GHz, <1 dB insertion loss.
3. Design 2-Channel Clock Sources with 6 GHz of main frequency, 20 dBm per Channel with phase matched

Through a combination of simulation, design, fabrication, testing, and data analysis, interns will gain practical experience and contribute to advancements in space-based sensor technologies.

The internship will held in Leiden (the Netherlands) in SRON (Netherlands Institute for Space Research) for duration of minimum of 5 to maximum of 9 months. Furthermore, a monthly allowance is provided for student.

Requirements:

1. Currently enrolled in a master's degree program in Electronics Engineering
2. Background in RF and Microwave design
3. Proficient in using RF test equipment and software design
4. Good English, both verbal and written

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