

Job opening announcement : CPJ KIDS4CMB

In February 2024, the CNRS will announce the opening of a tenure-track position ‘CPJ’ (Junior Professor Chair) entitled ‘Conception, development, and implementation of new detectors at very low temperatures for fundamental physics and astrophysics’ called **KIDS4CMB**. The selected candidate will be affiliated to one of the following three laboratories in Grenoble: Néel Institut, LPSC, IPAG, who have been collaborating for many years on this subject ([GIS-KIDS](#)).

Concerning the Néel Institute, the team ([HELFA](#)) has been developing cutting-edge instruments in astrophysics and particle physics since the 1980s. Since 2009, we have been pioneers and leaders in the use of new kinetic inductance detectors (KID) for ground-based astronomy in millimeter wavelengths. We originated and led the NIKA, NIKA2, and CONCERTO programs and play a crucial role in other experiments such as KISS, TIFUUN (collab. Delft), RICOCHET (collab. Lyon), and DANAÉ (collab. Roma) in Astrophysics and Particle Physics. Additionally, we contribute significantly to the detection of neutrinos and rare events, such as dark matter. Currently, we are involved in numerous projects, including the detection of B modes in the Cosmic Microwave Background (CMB) and the development of a new imaging/spectroscopy instruments based on the hybridization of KIDs technology with the bolometer concept.

We are looking to recruit a researcher who can bring new ideas and skills in instrumentation in the following areas: exploring new configurations of superconducting detectors, cryogenics, innovative electromagnetic configurations especially in radiofrequency, nanofabrication processes, electronics, data acquisition, as well as the exploration of new scientific applications, etc. The ideal candidate is a researcher, instrumentalists, with a strong experimental background in low-temperature physics and electromagnetism.

This is a tenure-track position aimed at researchers with a significant research record in the scientific domain (salary will depend on experience). It is endowed with a research funding package of 200 000 euros and it is projected to lead to a permanent position of research director DR2 at CNRS after 3 to 6 years following a positive evaluation by a tenure commission. It also includes 42 hours of teaching (in English or in French) per year before tenure.

Provisional timetable (to be confirmed):

- From 02/14 to 03/20 for applications
- Review of applications from 04/17 to 06/27
- Auditions from 05/02 to 07/12
- Hiring from September 1

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