Postdoctoral Position at IRAM in Grenoble: WIDENING – A NIKA2 ANR on Nearby Galaxies

Institut de Radio Astronomie Millimétrique (IRAM)
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Email submission: jobs-scsu@iram.fr – IRAM personnel department

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IRAM is an international research organization for millimeter and submillimeter astronomy supported by the CNRS (France), the Max-Planck Gesellschaft (Germany), and the IGN (Spain) and operating two mm/submm observatories, the 30-meter single-dish telescope (Spain) and the interferometer NOEMA (France).

IRAM invites applications for a postdoctoral research position at IRAM/Grenoble to support and lead the analysis, interpretation, and dissemination of millimeter maps of 20 nearby galaxies which have recently been obtained in the framework of the IMEGIN Large Program (PI: Suzanne Madden) in guaranteed time with NIKA2, a continuum camera at the IRAM 30-meter telescope allowing for simultaneous 1mm and 2mm observations. The French National Agency for Research (ANR) is funding the WIDENING project led by Frédéric Galliano (CEA) which provides funding for two PostDoc positions (at CEA/Saclay and at IRAM/Grenoble).

Here, we advertise the IRAM PostDoc who will be working with Carsten Kramer (IRAM) and the WIDENING consortium. The selected candidate shall help developing tools combining NIKA2 with ancillary data, e.g. with ACT and Planck maps to retrieve extended scales (“feathering”), with maps of the free-free and synchrotron radio emission tracing ionized gas, and with maps of CO 2-1 tracing molecular gas. In a first step, the results will be used to study maps of the 1mm/2mm index of the spectral energy distributions. In addition, the PostDoc shall lead follow-up proposals for individual galaxies with NIKA-2, revisiting observing strategies and data reduction, and also with other observatories, e.g. MUSTANG-2/GBT, NOEMA. Aims and scope of the work will be adapted on the way.

The ideal candidate has experience in observational studies of the ISM at millimeter/submillimeter wavelengths with focus on continuum emission of dust. Strong assets are experience in the handling of large data sets, knowledge of a programming language like Python, experience in collaborative team work. Candidates must have completed their PhD before taking-up the position. The deadline for receiving applications is end of October 2024. The PostDoc grant is for three years. Applications should be sent as one pdf file to the IRAM personnel department, jobs-scsu@iram.fr, and should include a cover letter indicating motivation and qualifications, a curriculum vitae with a list of publications, and a short research statement. Applicants should add the names of two referees who could provide letters of reference. Inquiries should be addressed to Carsten Kramer, kramer@iram.fr, and Frédéric Galliano, frederic.galliano@cea.fr .