Early-Career Positions in Cosmic Infrared Background Program with Euclid

Applications are now being accepted for one or more Postdoctoral Associates (or higher level) to support the Looking at Infrared Background Radiation Anisotropies with Euclid (LIBRAE) investigation within the Observational Cosmology Lab at NASA’s Goddard Space Flight Center (GSFC) in Greenbelt, MD. Each postdoc will have an appointment at the University of Maryland College Park (UMCP), funded by NASA through the Center for Research and Exploration in Space Sciences & Technology II (CRESST II) cooperative agreement.

LIBRAE is one of three US-based NASA science projects to be included in the European Space Agency’s (ESA) dark energy Euclid mission. The mission will measure source-subtracted cosmic infrared background (CIB) fluctuations and determine the epochs of the populations producing these fluctuations. In addition to X-ray and microwave data, LIBRAE will probe the contribution of early black holes, and the condition of intergalactic gas at these epochs. The postdoc(s) will participate in the development of LIBRAE, following the 2023 successful launch of Euclid for its 6-year mission.

Candidates must have earned a Ph.D. in astronomy, physics, or a related field, ideally within the last four years. Candidates should have interest in at least one of the following three areas: (1) preparation of accurate maps from Euclid data for probing the source-subtracted CIB anisotropies; (2) reconstructing contributions from known galaxy populations to the CIB signal; and (3) further theoretical development of contributions from early populations, such as Population 3, direct-collapse black holes, or primordial black holes making up dark matter. Preference will be given to candidates with an interest in either area (1) and/or (2), but strong candidates interested in working in area (3) are welcome to apply.

The position is for two years, with the possibility of extension upon mutual agreement and availability of funds. The nominal starting date is in Summer or early Fall 2024, but some flexibility is possible. We expect the postdoc(s) to work locally, with a regular schedule on-site at GSFC. Salary and benefits are competitive, commensurate with experience and qualifications.

Candidates should send a complete application – which includes a Curriculum Vitae including a publication list, a statement of research interests, and contact information for three references – through the CRESST II Breezy application platform by Monday, April 15th, for full consideration. The position will remain available until filled.

For more information about the research, contact Dr. Alexander Kashlinsky (alexander.kashlinsky@nasa.gov). For information about CRESST II or UMCP, contact Dr. Tracy Huard (thuard@umd.edu).
Offers of employment are contingent on completion of a background check. A prior criminal conviction or convictions will not automatically disqualify a finalist from employment in the position.

The University of Maryland, College Park, an equal opportunity/affirmative action employer, complies with all applicable federal and state laws and regulations regarding nondiscrimination and affirmative action; all qualified applicants will receive consideration for employment. The University is committed to a policy of equal opportunity for all persons and does not discriminate on the basis of race, color, religion, sex, national origin, physical or mental disability, protected veteran status, age, gender identity or expression, sexual orientation, creed, marital status, political affiliation, personal appearance, or on the basis of rights secured by the First Amendment, in all aspects of employment, educational programs and activities, and admissions.