

Galaxy evolution postdoctoral position within the FOGGIE group, Johns Hopkins University

We invite applications for a postdoctoral fellow/assistant research scientist in galaxy evolution at the Johns Hopkins University in Baltimore, MD. The successful applicant will work with Drs. Molly Peeples and Jason Tumlinson at JHU's Center for Astrophysical Sciences (CAS) and the Space Telescope Science Institute (STScI), and with their network of collaborators.

Our research group is currently focused on using cosmological hydrodynamic simulations to understand the co-evolution of galaxies and their gaseous and stellar halos. We employ a combination of simulations, analytic modeling, and comparisons to observation, and we welcome applicants with interests in all areas of theoretical studies of galaxy evolution. The open position is targeted at a junior scientist with a primarily theoretical background, including numerical simulations, but we are especially interested in applicants with an interest in creating synthetic observations and interpreting real ones. Time will be available for independent research or new projects in related areas.

The nominal start date is September 2024, with an initial appointment of two years and an expected renewal of up to three years, subject to satisfactory performance and the availability of funds. A start date as late as Spring 2025 is negotiable. The competitive starting salary depends on year of PhD and level of expertise and includes a relocation package. Benefits are included (health insurance, life insurance, and retirement) at the faculty level for JHU. The postdoc will also have full access to the postdoctoral career mentoring programs based at both JHU and STScI. We especially welcome applications from women, minorities, veterans, LGBTQ+ people, and other members of underrepresented groups. Questions about the position should be directed to molly@stsci.edu and tumlinson@stsci.edu. More about our group can be found at <https://foggie.science/>.

Requirements: Applicants must hold a Ph.D. degree in astronomy or a related field. Expertise in one or more of the following areas is desirable: (a) hydrodynamic physics and simulations in any modern code framework, (b) galaxy evolution, (c) the circumgalactic medium, (d) stellar population synthesis, (e) connecting synthetic data to observations, and (f) code development in a team-based and/or open-source environment. We are specifically looking for an applicant with an interest (but not necessarily expertise) in generating, analyzing, and interpreting synthetic data for topics including, but not limited to, ionization modeling of outflows, IFU emission-line maps, resolved stellar populations, galaxy images, the CGM in emission and absorption, slitless spectroscopy, and HI galaxy maps.

Please email a single PDF to molly@stsci.edu and tumlinson@stsci.edu with the following information:

- 1) a cover letter indicating interest in the position, including a summary of relevant previous work and work in prep;
- 2) a list of references; and
- 3) a curriculum vitae, including a list of publications.

Applications received by Monday, April 1, 2024 will be given full consideration, but applications will be accepted until the position is filled.

The Johns Hopkins University is an affirmative action/equal opportunity employer and welcomes applications from women and members of underrepresented groups.