
Elisabeth A.C. Mills
PhD candidate at the University of Los Angeles-California
Physics and Astronomy Building
430 Portola Plaza, Box 951547
Los Angeles, CA 90095-1547
millsb@astro.ucla.edu

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Dr. Clare Dobbs
School of Physics and Astronomy, University of Exeter
Stocker Road
Exeter EX4 4QL
United Kingdom

Dear Dr. Dobbs:

I am applying for your advertised postdoctoral position in the Astrophysics group at the University of Exeter. My curriculum vitae, list of publications, and research statement are enclosed for your review. I would appreciate your consideration for this job opening as my ongoing research projects to study the detailed properties of Galactic center molecular clouds and my extensive radio and millimeter observing experience are an ideal match for this position.

I am currently leading multiple research projects including the detection and characterization of a widespread, hot component of molecular gas in the Galactic center using the Green Bank telescope, and a new high-resolution survey of Galactic center gas using the Very Large Array, which will yield the first resolved temperature maps of Galactic center molecular clouds. I propose to expand on these projects by undertaking complementary surveys with the VLA and the Atacama Large Millimeter Array to study the density structure of Galactic center clouds. Together with my existing work, this will allow me to study the physical processes which cause gas conditions in the Galactic center to be different than those in the Galactic disk, and to constrain the initial conditions of Galactic center star formation. As a postdoctoral fellow, I plan to continue to lead independent research projects using cutting-edge, open-access and European facilities including the GBT, Effelsberg, VLA and ALMA.

Sincerely,

Elisabeth Mills