
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@ucla.edu

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CfA Postdoctoral Fellowship Program
Harvard-Smithsonian Center for Astrophysics
60 Garden Street, MS 67
Cambridge, MA
02138

Dear Sir or Madam:

I am applying for the Center for Astrophysics Postdoctoral Fellowship program. My curriculum vitae, a list of my publications, a summary of my previous and current research, and a proposal for the research I will carry out while a fellow are enclosed for your review. My ongoing research projects to study the Galactic center using open-access facilities are an ideal match for the research environment and resource available at the CfA. I am currently leading exciting 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 large-area, high-resolution survey of Galactic center gas using the newly-upgraded Karl G. Jansky Very Large Array (VLA) that is discovering widespread maser activity, and will yield the first resolved temperature maps of Galactic center molecular clouds.

At the CfA, I will be able to expand on these projects by collaborating with an active star formation and Galactic center research community, and leading complementary surveys with the VLA, SMA, 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.

Sincerely,

Elisabeth Mills