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ASTRON
Oude Hoogeveensedijk 4
7991 PD Dwingeloo
The Netherlands

Dear Sir or Madam:

I am applying for the ASTRON Postdoctoral Fellowship program. My curriculum vitae, a statement of my scientific interests, 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 extreme environment of the Galactic center using open-access facilities are an ideal match for the research environment available at ASTRON. 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 ASTRON, I will continue to lead complementary surveys with the VLA and the Atacama Large Millimeter Array to study the density structure of Galactic center clouds. I will further have the opportunity to collaborate with researchers at ASTRON studying nearby galaxies, active galactic nuclei, and feedback processes. These opportunities 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 compare them to the conditions in more extreme extragalactic environments.

Sincerely,

Elisabeth Mills