



Michigan**Engineering**

Atmospheric, Oceanic and Space Sciences

AOSS Research Position

Job Title

Assistant Research Scientist

Job Duties

Perform basic research in the development and application of gas kinetic theory and computational fluid dynamics methods to a number of tenuous planetary atmosphere problems in space science. These include the dusty-gas tenuous atmospheres of comets, the upper atmosphere of Mars, as well as the recently escaping gas plumes from Saturn's inner icy moon, Enceladus. The research involves analysis of ground-based telescopic observations, as well as the analysis and planning for in situ spacecraft measurements by the Cassini spacecraft now in its main mission orbiting Saturn and the ESA/NASA Rosetta spacecraft on its way to the comet 67P/Churyumov-Gerasimenko. A range of computational modeling tools will be used and developed, which include our Direct Simulation Monte Carlo (DSMC) model, as well as future developments using the Center for Space Environment Model code BATS-R-US. Codes will be run on the Columbia massively parallel computer system at NASA Ames.

Rate of Pay

\$68,391/year

Position Requirements

Ph.D. in Space Sciences to include large scale simulation of tenuous planetary atmospheres for ground-based telescope observations and spacecraft mission planning, as well as rarefied gas dynamics in a parallel computing environment.

Resume to Susan Griffin, HR Coordinator, U-M Space Research Building, 2455 Hayward, Rm. 2207, Ann Arbor, MI 48109-2143.