

The
Astrobiology Program
at the University of Washington
presents

Andrew Pohorille, PhD

Program Leader, Biomolecular & Cellular Modeling Program

Exobiology Branch (SSX)

NASA Ames Research Center

Cyanobacteria in a Lunar Environment

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2:30 pm

A-118 Physics/Astronomy Auditorium

Can life be transported beyond its planet of origin, and adapted to survive and thrive on the Moon? Can microorganisms be useful for life support and *in situ* resource utilization in a sustained space exploration? These fundamental questions were recently discussed at a workshop that brought together microbiologists, planetary scientists and experts in flight experiments and hardware. The focus was on cyanobacteria as model organisms because of their antiquity on earth, metabolic diversity, resilience to adverse conditions, ability to efficiently produce oxygen and hydrogen, and the existence of advanced capabilities for their genetic manipulation. I will discuss the main findings of the workshop regarding the challenges of and a research program for establishing cyanobacteria in a lunar environment. Such a program will help to connect astrobiology with NASA's missions to the Moon.