

FACULTY LECTURE SERIES

SHARING OUR WORK AND KNOWLEDGE

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SPRING 2015

Hawai'i Space Exploration Analog and Simulation

- Kim Binsted, Associate Professor

HI-SEAS (Hawaii Space Exploration Analog and Simulation, www.hi-seas.org) is a habitat on an isolated Mars-like site on the Mauna Loa side of the saddle area on the Big Island of Hawai'i at approximately 8200 feet above sea level. Here, crews of six people live and work through long-duration simulations of Mars exploration missions (four, eight and twelve month long).

This research aims to answer several critical questions to prepare for extended space exploration, including:

- How should the crew be selected?
- What skillsets will they need?
- How should they be trained?
- How can we best monitor their physical and psychological health?
- What should we do if a problem arises?

Our goal is to help NASA remove barriers to the human exploration of Mars.

11:30am - 12:30pm

Hamilton Library, Room 301

Admission Free | Refreshments Provided



Dr. Kim Binsted received her PhD in Artificial Intelligence from the University of Edinburgh. Her thesis topic was the computational modeling and generation of punning riddles; her program generated puns such as “What do you call a Martian who drinks beer? An ale-ien!”

In 2002, she joined the faculty of the Information and Computer Sciences Department at the University of Hawai'i at Mānoa, where she does research on artificial intelligence, human-computer interfaces, and human factors for space exploration.

Dr. Binsted was Chief Scientist on the FMARS 2007 Long Duration Mission, a four-month Mars exploration analogue on Devon Island in the Canadian High Arctic. In 2009, she spent her sabbatical as a visiting scientist at the Canadian Space Agency (CSA), working on the CSA's planetary analogues program. She is now the principal investigator for the HI-SEAS project.

Presented by: Office of the Vice Chancellor for Research



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<http://manoa.hawaii.edu/ovcr/mfls/index.html>