AIAA
The World's Forum for Aerospace Leadership

MSA
Mars Society Australia

DAVID COOPER MEMORIAL LECTURE 2023

Assoc. Prof. Katarina Miljkovic

Curtin University

What can Mars craters tell us about planetary crusts, origin of meteorites, resources and habitability?

This event is part of the 21st Australian Space Research Conference and a joint event with the AIAA

Monday September 25th 2023, 7 pm

level 2 of the Physics building, University of Tasmania

Map: https://www.utas.edu.au/__data/assets/pdf_file/0011/84287/Sandy-Bay-Campus-Guide.pdf

AUSTRALIAN SPACE RESEARCH CONFERENCE

UNIVERSITY of TASMANIA

What can Mars craters tell us about planetary crusts, origin of meteorites, resources and habitability?
Presented by Assoc. Prof. Katarina Miljkovic, Curtin University

Only in the mid-20th century was it confirmed that impact craters are formed by meteorite strikes. Many space missions have mapped planetary surfaces and provided detailed data about impact craters. While we only have about 200 confirmed impact structures on Earth, there are millions of craters identified on Mars, the Moon and other rocky surfaces in the Solar System. Impacts have played a key role in the evolution of rocky planetary surfaces, including origin on meteorites. Katarina will outline her work on physics behind the impact process. In this lecture, this will be specifically applied on Mars, and how impact craters on Mars tell a story about its crustal structure and evolution, origin of Martian meteorites, Mars' resource potential, past and present habitability.

Bio: Assoc Prof Katarina Miljkovic joined Curtin University in 2015 under a Curtin Research Fellowship. Prior to joining Curtin, she graduated from the University of Belgrade in 2006 in astrophysics and obtained her PhD from the Open University in the UK in 2010. She has held postdoctoral roles at MIT in USA, IPGP in Paris, and Imperial College London in the UK. Assoc Prof Miljkovic has won several competitive awards, including an Australian Research Council DECRA Fellowship, an Australian L'Oreal-UNESCO for Women in Science Fellowship, a WA Tall Poppy Young Scientist of the Year award and Women in Physics lectureship by the Australian Institute of Physics. She is currently an Australian Research Council Future Fellow, and she teaches in the Advanced Science course.

The David Cooper lecture

This annual lecture commemorates the life and work of Dave Cooper, an Australian space advocate who made a significant contribution to promoting Mars exploration in his home country.

Born in Adelaide, David Cooper worked for many years as a commercial pilot in remote parts of Western Australia and the Northern Territory. He was a member of the Planetary Society since the 1980s and also of the National Space Society and regularly attended space conferences, including one in the United States in 1990.

In 1998 Dave co-founded the Mars Society Australia (MSA), dedicated to promoting Mars exploration and serves as an Australian network for Mars researchers and enthusiasts. He was vice-president until February 2005 and president until his death in 2012.