

It takes MOXIE to send people to Mars

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Abstract:

Recently selected to fly on NASA's Mars 2020 mission, MOXIE is a 1% scale model of an oxygen processing plant that might support a human expedition sometime in the 2030s. MOXIE will produce 20g/hr of O₂ on Mars with >99.6% purity during 50 sols. According to the MOXIE proposal to NASA "More than a technology demonstration, MOXIE exercises a range of control parameters, probes performance margins, provides diagnostics of health and degradation, and exploits redundancy and modularity to explore technology options. The goal is to understand the parameters and protocols, the risks, development challenges, margins and threats, the constraints and requirements of a full-scale Mars In Situ Resource Utilization (ISRU) facility." Nine months into the Project, we will discuss how the promise compares to the reality.



725 Commonwealth Avenue
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3:00 pm

Refreshments
CAS Room 502

3:30 pm

Seminar
CAS Room 502

Next Week

- Haje Korth
JHU/APL
- Structure and Dynamics of
Mercury's Magnetosphere
Inferred from
MESSENGER
Observations and
Highlights from the
MESSENGER mission



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