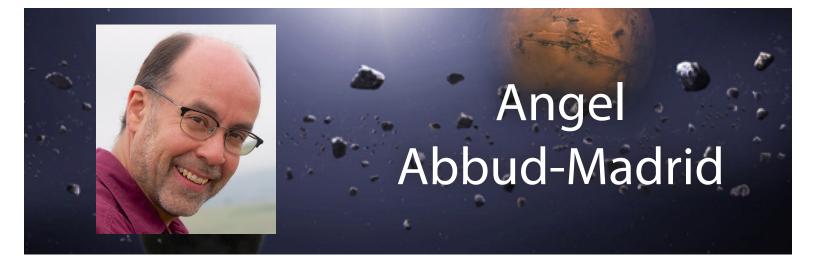
## **AES Seminar**



## Director, Center for Space Resources Colorado School of Mines

## Resources Beyond Earth: Enabling Future Exploration and the New Space Economy

## Friday, February 23, 2018 | KOBL 210 | 12:00 P.M.

**Abstract:** Throughout human history, resources have been the driving force for exploration and also the means to do so. However, as we continue our exploration of space, our efforts will eventually become limited by the materials we can carry from Earth. In recent years, space agencies and the private sector have increasingly realized that further exploration and growth of commercial opportunities in space will require extraction of materials, production of propellants, and power generation from extraterrestrial resources for more affordable and flexible transportation, facilities construction, energy production, and life support. This rising interest on the search, extraction, and use of resources in space, the Moon, asteroids, and other planets may be about to radically influence future space destinations, mission architectures, spacecraft design, and associated technologies.

**Bio:** Dr. Abbud-Madrid is the Director of the Center for Space Resources at the Colorado School of Mines, where he also leads the new Space Resources Program, aimed at educating scientists, engineers, economists, entrepreneurs, and policy makers in the field of extraterrestrial resources. He is currently the President of the Space Resources Roundtable organization. He has more than 25 years of experience in space projects on NASA's drop towers, microgravity aircraft, the Space Shuttle, and the ISS and received the NASA Astronauts' Personal Achievement Award for his contributions to human spaceflight. Dr. Abbud-Madrid holds a BSE in Mechanical and Electrical Engineering from ITESM, México, and Master's and Ph.D. degrees from Princeton University and CU Boulder.



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