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HEO Robotics Master Plan (or how to visit asteroids for free, in three simple steps)

Dr. William Crowe
CEO, High Earth Orbit Robotics

Abstract: Having a large number of humans living off Earth will require the use of resources gathered in space from places such as the Moon, Mars and asteroids. All these objects need further prospecting and exploration before they are viable for mining investment. In particular, there are over 850,000 known asteroids and yet only 14 have been explored, partly because the average mission cost per asteroid is $US500 Million. Even with significant mission cost reduction, there isn't yet a commercial case for prospecting asteroids.

In this presentation, Dr. William Crowe, CEO of High Earth Orbit Robotics, will lay out the master plan for his company and how they are using existing businesses to start prospecting asteroids with zero cost. Dr. Crowe hopes he can inspire others to find innovative ways to bring the future closer as well.

Bio: Dr. William Crowe co-founded a company, High Earth Orbit Robotics, with a long-term vision to prospect and utilise asteroid resources and an immediate goal of using the same technology to inspect and resolve anomalies on satellites in orbit. His company counts the Royal Australian Air Force as a customer and it went through UNSW Sydney's Founder10x program. William has represented the company to win a place on the NSW/Austrade space bootcamp in Silicon Valley and win the Australian Space Research Conference's Goldfish startup competition. He has a PhD in Aerospace Engineering from UNSW Sydney. His research focus was on the use of swarms of spacecraft to characterise asteroids during flyby. He won several international awards for his research, including the competitive Space Generation Advisory Council "Move an Asteroid" scholarship for his work on using small spacecraft in Earth orbit to intercept asteroids as they pass through the Earth-Moon system.

Date: **14th Jan 2020, Friday**
Time: **12:00 Noon**
Venue: **A618, R&D Block**