

Session 6:  
Affordable Options for Increasing  
the Accessible NEO Catalog

Chaired by:  
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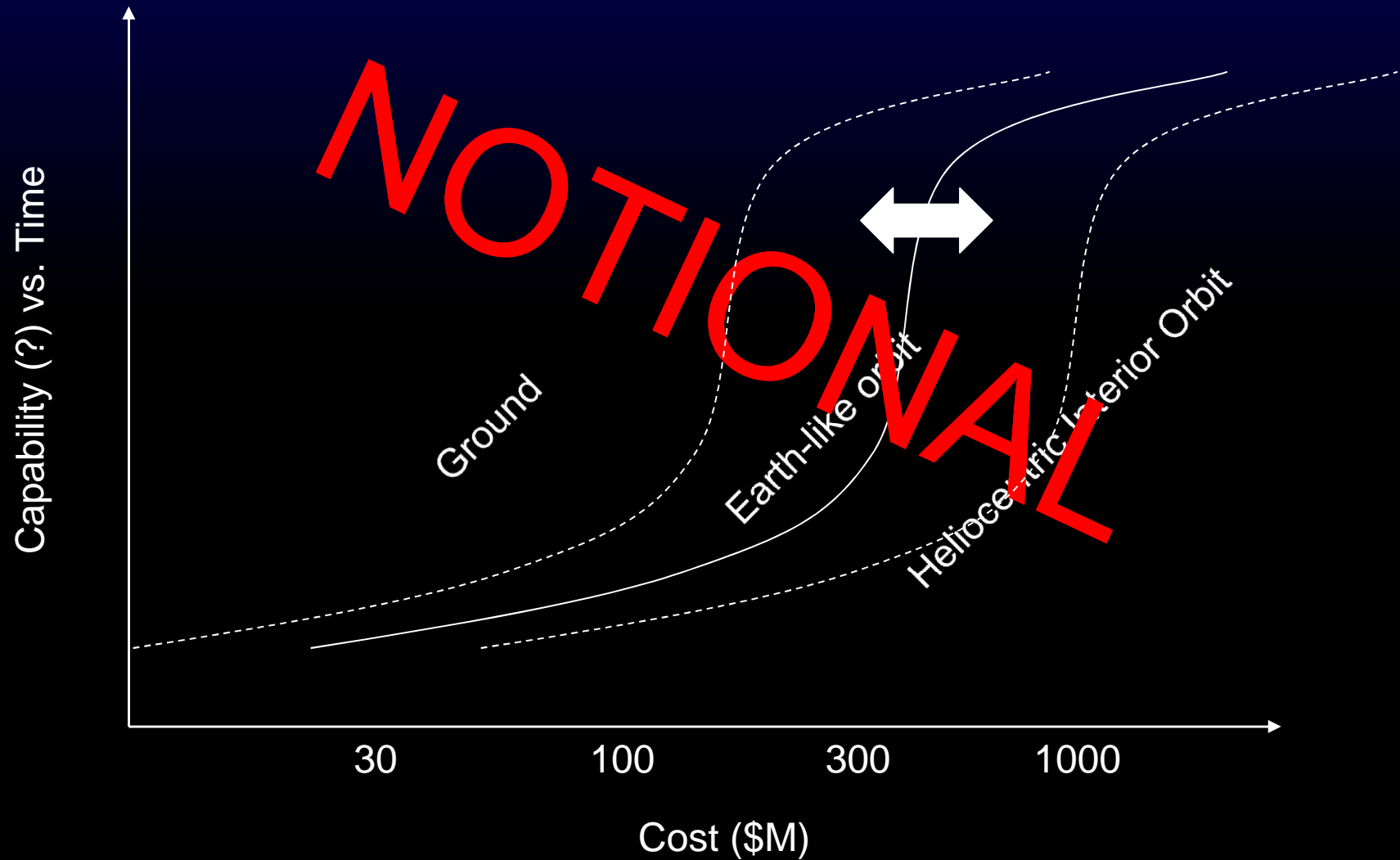
# Session Objective

The trade space for survey options for further identification of potential human-accessible NEO targets will be discussed, and then examined in some detail through the presentation of several different survey concepts that span this trade space. Capability (an assessment of discovery completeness) as a function of cost will be explored for the various options considered.

# Increasing the Catalog of Accessible NEOs

- What survey concepts exist for finding additional targets?
- How effective are they?
- What capability is needed?
- What is capability as a function of cost?
- For each concept, explore the relevant trade space
  - What is the preferred observation location?
  - What detection spectrum is to be used?
  - What capability can be achieved & in what time period?
  - What are the mission costs and key drivers, and how were these evaluated?

# Capability vs. Cost



## Session 6 Panel

- **Andy Cheng**, Chief Scientist, Space Department, Johns Hopkins University Applied Physics Laboratory  
*“NEO Orbit Simulation Approach”*
- **Lynne Jones**, LSST Solar System Project Scientist, University of Washington  
*“NEO Detection Capabilities of LSST”*
- **Ken Hibbard**, Senior Spacecraft Systems & Operations Engineer, Johns Hopkins University Applied Physics Laboratory  
*“NEAR-Earth Survey Telescope (NEST) Human Robotic Precursor Mission Concept”*
- **Amy Mainzer**, WISE Deputy Project Scientist, Jet Propulsion Laboratory  
*“Next-Generation Space-Based IR NEO Surveys”*
- **Robert Arentz**, Adv. Systems Manager, Ball Aerospace  
*“A Candidate NEO Survey Mission for Affordable Human Spaceflight Target Assurance”*