



## 2<sup>nd</sup> KISS Workshop Objectives

1. Collect comments/changes to complete the KISS report
2. Define a Top-level Human Exploration Campaign Based on the Return of an Entire NEA to Lunar orbit
3. Define a Technology Development Roadmap Required to support the Exploration Campaign
4. Outline a KISS Follow-on Proposal including writing assignments
5. Outline a NASA Proposal including writing assignments

# Wired.com Article

## *The Plan to Bring an Asteroid to Earth*

PASADENA, Calif. — Send a robot into space. Grab an asteroid. Bring it back to Earth orbit.

This may sound like a crazy plan, but it was discussed quite seriously last week by a group of scientists and engineers at the California Institute of Technology. [The four-day workshop](#) was dedicated to investigating the feasibility and requirements of capturing a near-Earth asteroid, bringing it closer to our planet and using it as a base for future manned spaceflight missions.





# Action Items from 1<sup>st</sup> Workshop

## Action Items (from 9/30/2011)

- Define an observation campaign (including publishing a list of >100-m objects for getting the spectra) – Martin Elvis
- COMPASS run for rough costing – John Dankanich
- Trajectory: end-to-end trajectory through capture: Damon Landau
- Synergy with human missions – Dan Mazanek
- ACS and capture tumbling object – Guru Singh
- Sample collection design – Brian Wilcox
- MEL – John Dankanich
- Summary of required technology development – Paul Dimotakis
- Target selection criteria – Chris Lewicki
- How did we down select to our two options? – Chris Lewicki
- SEP Stage design – John Brophy
- Prox-ops & Instrumentation – Julie Bellerose
- Liability / legal – Tom Jones
- Source of mass uncertainty (components & mitigation): Michael Busch
- International agreements: Willie Williams
- Planetary Protection: Joe Nuth
- X-Prize Consideration: Chris Lewicki
- Notational Program Schedule: Bob Gershman
- Dust Mitigation: Colin Williams
- Trajectory Design for 2000SG234: Nathan Strange



# Possible Follow-on Tasks

1. Develop a follow-on KISS Proposal
2. Develop a follow-on NASA Proposal
3. Perform a NASA Pre-Phase A Mission/System Design
4. Define possible X-prize approaches