
# The Explorer Program

## Presentation to the Astrophysics Subcommittee

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# Astrophysics Explorer Program

- The Astrophysics and the Heliophysics Explorer Programs are separate.
- Current Astrophysics Explorer Missions:
  - Operating (and will be included in the 2014 Senior Review)
    - Swift (MIDEX), launched 2004 November 20
    - Suzaku (MO – partnered with JAXA), launched 2005 July 10
    - NuSTAR (SMEX), launched 2012 June 13
  - In Development
    - ASTRO-H (MO – partnered with JAXA), scheduled for launch in 2015
  - In Formulation
    - NICER (MO), targeted for transportation to ISS in 2016
    - TESS (EX), targeted for launch in 2017
- Future AOs
  - SMEX and MO in late summer/early fall 2014 for launch ~ 2020
  - EX and MO NET 2016 for launch ~ 2022

# 2014 Astrophysics Explorer AO

- Community Announcement released on 2013 November 12 that NASA will solicit proposals for SMEX missions and Missions of Opportunity.
- Draft AO targeted for spring 2014, with Explorer Workshop ~ 2 weeks later.
- Final AO targeted for late summer/early fall 2014, with Pre-Proposal Conference ~ 3 weeks after final AO release. Proposals due 90 days after AO release.
- PI cost cap $125M (FY2015$) for SMEX, not including cost of ELV or transportation to the ISS.
- MOs allowed in all three categories: Partner MO, New Missions using Existing Spacecraft, or Small Complete Mission, including those requiring flight on the ISS.
- PI cost cap $35M for sub-orbital class MOs, which include ultra-long duration balloons, suborbital reusable launch vehicles, and CubeSats. Other MOs (not suborbital-class) have a $65M PI cost cap.
- Two-step process. Step 1 selects 2-3 SMEX missions and 1-2 MOs for 1-year Phase A concept studies, funded at $1M for SMEX and $250K for MOs. After detailed review of the Phase A Concept Study Reports, Step 2 down-selects 1 SMEX and 1 MO for Phase B and subsequent phases.
- More info at http://explorers.larc.nasa.gov/APSMEX/