Heliophysics
Explorers PI Forum
Crystal City, VA

Guidance and Expectations

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The First Explorer was a *Heliophysics* Investigation

A proud tradition
- Manage risk to achieve high-reward science
- Maintain frequent access to space

Risk management
- Performance
- Cost
- Schedule

To achieve frequent access to space for high-reward science, Explorers program *must* understand and manage risks.
Heliophysics SMEX 2016 Step 1 Selections
July 2017

- **FOXSI** – NASA GSFC - PI: Christe
  - Hard x-ray imaging of Sun: Flares (very big to very small) & AR

- **MUSE** – LMSAL – PI: Tarbell
  - EUV simultaneous multi-slit/multi temperature spectroscopy of loops

- **PUNCH** – SWRI – PI: DeForest
  - Coronagraph and Heliospheric Imagers with 360° coverage

- **TRACERS** – Univ. Iowa – PI: Kletzing
  - Multi-smallsat measurements of precipitating particles in cusp region traced to reconnection sites at magnetosphere boundary

- **MEME-X** – NASA GSFC – PI: Moore
  - multi-smallsat measurements of ion outflow
Heliophysics Mission of Opportunity 2016 Step 1 Selections
July 2017

Mission of Opportunity Small Complete Mission

- **SunRISE** – Univ. Michigan – PI: Kasper
  - Multi-smallsat phased array for *imaging* of Type II & Type III radio

- **AWE** - Univ. Utah – PI: Taylor
  - ISS-based global observations of gravity waves at top of mesosphere

Partner Mission of Opportunity – Univ. New Hampshire - Kucharek

- **THOR-US** – participation in ES mission to characterize role of turbulence in magnetospheric-boundary plasma physics
- Pending ESA downselect of M5