

Charge to the PAGs on Astrophysics Probes

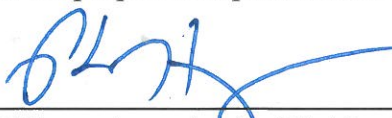
The NASA Astrophysics Division (APD) has started preparations for the 2020 Decadal Survey which will prioritize strategic missions to follow JWST and WFIRST. Taking into account the October 2015 reports from the Astrophysics Program Analysis Groups (PAGs), NASA is initiating mission concept studies for four large mission concepts (see <http://science.nasa.gov/astrophysics/2020-decadal-survey-planning/>). One of the tasks of the 2020 Decadal Survey Committee will be to recommend a portfolio of astrophysics missions. The Decadal Survey Committee may choose to recommend a portfolio of missions containing a mix of prioritized large and medium-size mission concepts. NASA and the community are interested in providing appropriate input to the 2020 Decadal Survey regarding medium-size mission concepts (i.e., Astrophysics Probe concepts); Astrophysics Probes are astrophysics missions with life cycle costs (LCCs, including launch and operations costs) greater than a MIDEX but less than ~\$1B. Several ideas for Astrophysics Probe concepts have been articulated through the PAGs in a series of community meetings and/or white papers.

In order to facilitate the Decadal Survey prioritization process, APD has identified the following implementation options to convey ideas for Astrophysics Probes to the Decadal Survey Committee:

1. Issue a solicitation through ROSES for Astrophysics Probe mission concept study proposals. The proposals will be evaluated via a peer-review process and APD will select a few (~10) for one-year studies. A modest (~\$100K) amount of funding would be allocated for each study; cost assessment mechanisms would need to be discussed. The results of the studies would be presented to the Decadal Survey Committee. The Decadal Survey Committee would have the option of asking NASA to conduct further one-year studies at a higher level of detail (and at a higher cost for each study) for a small number (~3) of medium mission concepts.
2. Do nothing and let the community self-organize. Most likely this will result in submission of many white papers to the 2020 Decadal Survey from interested individuals and groups, as during the 2010 Decadal Survey.

APD is interested in hearing feedback about these implementation options from the astrophysics community and about other options the PAGs may wish to suggest.

Hence, I hereby charge each of the three astrophysics Program Analysis Groups (Cosmic Origins PAG, Exoplanet Exploration PAG, Physics of the Cosmos PAG) with providing 2-page written reports to the Astrophysics Subcommittee (APS) by March 7, 2016, and presentations to the APS at its March 15-16, 2016, meeting for discussion and assessment of all the proposed implementation options.



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1/14/16

Date