



A Plan for Astrophysics Probes –

studies evaluation and implementation process

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Phase	Nominal Timescale	Leading entity
1- review	12/2016 – 01/2017	HQ
2- study selections	02/2017	HQ (input from PO)
3-implementation	03/2017-09/2018	PO
4-Independent Cost Assessment	TBD	SOMA/HQ

3/21/17



Astrophysics Probes Plan (1/5)

Four Phase Process that covers: solicitation, proposal selection, implementation, and Independent Cost Validation

- **Phase 1: Proposals evaluation and peer review (present – end January 2017)**
 - HQ develops and issues ROSES solicitation, organizes peer review and recruits reviewers, manages output of review (evaluation forms, notification letters)
- **Phase 2: Select and Develop recommendations to DD (February 2017)**
 - APD staff discusses the review output
 - PS and PE present the output to both POs and gather their feedback
 - PS and PE develop list of recommended selections
 - PS and PE present to APD Director who makes the final choice and assigns studies to both PCOS/COR and ExEP POs
 - HQ will initiate the grants. Selected PIs will get ~ \$150K to develop their science case



Astrophysics Probes Plan (2/5)

- **Phase 2 (cont'd) : Selected Studies Design Lab Assignments**
 - PIs will elect a design lab in their proposal: Team-X or IDL/MDL
 - The selected studies will be equally assigned to PCOS/COR and ExEP programs to manage, oversee, and guide the execution
 - The funds for the design labs studies will be delivered to the design labs directly by HQ. The approach & cost for each study's design lab run will be determined by the plan established with the PI's concurrence as described below in (A).



Astrophysics Probes Plan (3/5)

- **Phase 3: Implementation (March 2017 – September 2018).**

(A) Program Offices are responsible for insuring the design lab runs are conducted within allocated budget for each study and in time to allow PIs to complete their reports on schedule. Specific Functions are:

- Develop an integrated plan: The Program Offices will build a timeline for scheduling these studies through the IDL and Team-X labs. The Program Offices will establish a coordinated plan including a time line and deliverables with the design labs prior to initiating any design lab runs. The plan should be provided to HQ and the PIs at least one month prior to commencing a first at either lab.
- POs should identify synergies between all the studies to take advantage of commonalities of designs/requirements and economize the design lab expenditures, as applicable. PIs have the prerogative not to accept the PO recommendations.
- After the selection, work with each design lab and each PI to develop a plan showing steps, schedule and milestones for each selected study
- Monitor grant funding to the selected Principal Investigators
- Monitor expenditures of design labs funds and report regularly to HQ
- Hold regular teleconferences with HQ for cross-pollination and resource leveraging
- The Program Offices will be responsible for communication with the PI study teams to ensure consistent and complete information is provided to all
- Manage the study runs with IDC and Team-X reporting regularly to HQ on status and products



Astrophysics Probes Plan (4/5)

- **Phase 3 (cont'd): Implementation (March 2017 – September 2018)***

(B) Program Office Point of Contacts: Each Program Office will assign a single Point of Contact to oversee these studies during the design implementation period; specifically the following individuals are requested because of their previous design lab experience in conducting such studies:

- Keith Warfield/JPL
- Gabriel Karpati/GSFC

(C) Final product will be:

- Each study will be presented as a stand alone submittal (prepared by the PI per the AO).
- An integrated report of all studies summarizing salient features and costs for delivery to the HQ PS and PE and an Executive Summary of all studies (prepared by the Program Offices)

* Extended as appropriate if necessary



Astrophysics Probes Plan (5/5)

- **Phase 4: Independent Cost Assessment**

- The Science Office for Mission Assessment (SOMA) office at LaRC will perform an Independent Cost Assessment, building on their experience with the Explorers program.
 - HQ will transmit the Team-X and IDL products to SOMA
 - SOMA's products will be delivered directly to HQ



Probe Studies Assignments

Proposal Number	Principal Investigator	Affiliation	Title	Recommended Award	Design Lab/PO
16-APROBES16-0004	S. Hanany	Univ. of Minnesota	Inflation Probe Mission Concept Study	\$150,000; new SOW required	TeamX/ExeP
16-APROBES16-0005	J. Glenn	Univ. of Colorado	Galaxy Evolution Probe	\$145,221	TeamX/ExeP
16-APROBES16-0008	P. Ray	Naval Research Laboratory	STROBE-X: X-ray Timing and Spectroscopy on Dynamical Timescales from Microseconds to Years	\$149,141	IDC/PCOS-COR
16-APROBES16-0009	W. Danchi	NASA's Goddard Space Flight Center	Cosmic Evolution through UV Spectroscopy (CETUS)	\$150,000; new SOW not required (<20% cut)	IDC/PCOS-COR
16-APROBES16-0010	J. Camp	NASA's Goddard Space Flight Center	Transit Astrophysics Probe Concept Study	\$134,641	IDC/PCOS-COR
16-APROBES16-0017	R. Mushotzky	Univ. of Maryland	AXIS: A High Spatial Resolution X-ray Probe Satellite	\$150,000; new SOW required	IDC/PCOS-COR
16-APROBES16-0020	P. Plavchan	Missouri State Univ.	EarthFinder : A Diffraction-Limited Precise Radial Velocity Observatory in Space	Partial selection; new SOW required	No design lab run supported by NASA / ExeP
16-APROBES16-0021	S. Seager	Massachusetts Institute of Technology	Starshade Rendezvous Mission	Partial selection; New SOW required	TeamX/ExeP
16-APROBES16-0022	A. Cooray	Univ. of California, Irvine	Cosmic Dawn Intensity Mapper	\$121,041	TeamX/ExeP
16-APROBES16-0023	A. Olinto	Univ. of Chicago	Concept Study of the Probe Of Extreme Multi Messenger Astrophysics (POEMMA)	\$100,000	IDC/PCOS-COR

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