

Astro 2020



Decadal Survey on Astronomy and Astrophysics

CAA Update
31 March 2020

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Survey Structure (Background)

- Steering Committee (20 members)
 - plan overall review process, in consultation with NAS
 - synthesize outputs from the 13 science, program, and state of profession panels into an overall decadal strategy and survey report
 - member serves on each panel to facilitate communication, coordination
- Science Panels (6 panels, 8-11 members each)
 - review all science white papers, review science advances since Astro2010, identify high-priority scientific questions and discovery areas for the coming decade
- Program Panels (6 panels, 12 members each)
 - review relevant project/program APC's, assess proposed projects in terms of science return and priorities, technical readiness, risk, cost
- State of the Profession and Societal Impacts (1 panel, 15 members)
 - review health and demographics of the astronomy and astrophysics community, identify milestones and actions for the coming decade

Decadal Survey Timeline (Pre-COVID)



Status Report Through Early March (1)

- Six science panels completing their reports
 - preliminary reports presented to steering committee and program panels December 2019; 4 key science questions and 1 discovery area defined for each
 - draft reports delivered to steering committee in February, were reviewed by committee members; most issues raised presentational
 - 30 science questions and discovery areas encompass an exciting agenda for 2020's

Status Report Through Early March (2)

- Six program panels and State of the Profession panel completing final meetings
 - final sets of presentations from projects
 - TRACE analyses presented for most projects
 - panels for ground, space, and particles/gravitation assembling draft findings and advice to steering committee, for presentation at a face-to-face meeting in DC on March 24
 - State of the Profession (SoP) and Enabling Foundation for Research (EFR) panels completing information gathering and drafting of findings/advice to steering committee, for presentations at face-to-face meeting on May 4-6

Status Report Through Early March (3)

- Steering Committee
 - bi-weekly Zoom meetings in addition to face-to-face meetings, ramping up to weekly after March 24-26 meeting
 - review, feedback on draft science panel reports
 - cross-survey TRACE working group
 - coordinating working groups on cross-cutting topics
 - main deliberative and prioritization discussions beginning from late March

Impacts and Response to COVID-19

- From mid-March all panel meetings conducted remotely
 - some panels directly affected but completed meetings
 - result was a wide range of readiness for presentation of results to the steering committee
 - TRACE activities continued but some studies not ready in time
- Astro2020 Co-Chairs decided to delay presentation of program panel reports until after March 24
 - it is important for program balance that all panels achieve comparable levels of readiness
 - impacts at home (professional and family) imposing peak stress on participants during exactly this time frame
 - deadlines for other panels on hold while we reassess the situation

Planning Forward

- Core Principle: Balance the wish to maintain momentum with consideration for the well-being of survey participants and NAS staff. This translates to continuing work but with reduced efficiency.
- March 24-26 steering committee meeting was conducted remotely over two days
 - presentations from international agencies (ESA, ESO, JAXA)
 - reports of working groups and committee planning discussion
- Program panel presentations to be re-scheduled
- In the meantime the Astro2020 co-chairs are meeting via Zoom with individual program panels, to offer reassurances and review/discuss progress. All have been well-received and very productive.
- Co-chairs and NAS are discussing the overall survey schedule with the agencies

Questions?

NB: Now that deliberations are under way, we cannot comment on specific projects, missions, proposals, or white papers.

Technical, Risk, & Cost Evaluation (TRACE; formerly known as CATE)

- Independent evaluation of project/activity concepts for technical risk, maturity and cost/schedule
- TRACE process will provide an analysis of technology development needs and an independent cost assessment
- Analysis (and the survey) recognizes most concepts evaluated are early stage (pre-Phase A)
- Process is accommodating the varying levels of definition and maturity of implementation plans