

<p>Minutes of the Meeting of the Astronomy and Astrophysics Advisory Committee 27 February 2015 Teleconference National Science Foundation, Arlington, VA</p>
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Members attending:	James Buckley William Cochran Priscilla Cushman (Chair) Craig Hogan Klaus Honscheid	Angela Olinto (Vice-Chair) Angela Speck Suzanne Staggs Paula Szkody Jean Turner
Agency personnel:	Joan Schmelz, NSF-AST Patricia Knezek, NSF-AST Elizabeth Pentecost, NSF-AST Richard Barvainis, NSF-AST Philip Puxley, NSF-AST Vladimir Papatashvili, GEO-OPP	Randy Phelps, NSF-OIIA Jean Cottam, NSF-PHY Paul Hertz, NASA Kathleen Turner, DOE Eric Linzer, DOE Saul Gonzalez, OSTP
Others:	Monti DiBiasi, SWRI Steve Unwin, JPL Roeland Van der Marel, STScI	

MEETING CONVENED 12:00 PM EST, 27 February 2015

The Chair called the meeting to order.

Kathy Turner provided an update on DOE activities since the 28-29 January meeting. She reiterated that the Office High Energy Physics (HEP) is implementing the strategy detailed in the May 2104 report of the Particle Physics Project Prioritization Panel (P5). HEP is addressing the five competing science drivers with research in three frontiers and related efforts in theory, computing and advanced technology R&D. HEP is increasing emphasis on international partnerships such as the Large Hadron Collider (LHC) to achieve critical physics goals. Development of new capabilities in dark matter detection continues with baselining of 2nd-generation experiments, and in dark energy exploration with baselining of the Dark Energy Spectroscopic Instrument (DESI) and continued fabrication of the Large Synoptic Survey Telescope (LSST) camera.

The enacted FY 2015 budget for HEP is \$766M. The Major Item of Equipment (MIE) projects (LZ, SuperCDMS-SNOlab, and DESI) were all approved as new project starts in FY 2015.

The FY 2016 President’s Budget Request (PBR) for HEP (\$788M) is up relative to FY2015, \$44M over the FY 2015 request and \$22M over the FY2015 enacted budget. If the request is passed, it would be slightly above the P5 scenario B which was flat for 3 years starting with the FY 2014 request and then increasing 3% per year.

Patricia Knezek provided an update on NSF activities since the 28-29 January meeting. The FY 2016 PBR included FY 2015 “Estimates” for NSF accounts and divisions. These estimates reflect the NSF spending plan submitted to Congress for approval, within the numbers of the CROmnibus appropriation. LSST and DKIST construction are fully funded at the request levels of \$79.64 million and \$25.12 million, respectively. The MPS Directorate (+3.2%) and AST Division (+3.4%) both received increases above the FY 2015 request that were somewhat higher than the NSF Research and Related Activities account (+2.2%). MPS and AST percentages relative to the FY 2014 appropriations are very close to the overall NSF change for the R&RA account. Highlights for AST in FY 2015 are (1) the first year of DKIST

operations ramp, increase in ALMA operations; (2) AST expects to hold AAG steady, or increase \$1-2M from FY 2014; and (3) MSIP is being held relatively steady (down \$1M from FY 2014, as planned).

The 2016 PBR for NSF is for an overall increase of 5.2%, with a 4.3% increase over FY 2015 in Research and Related Activities. MPS (+2.2%) and AST (+1.0%) do less well than other parts of NSF. LSST and DKIST construction continue to be funded fully, at \$99.67 million and \$20.00 million, respectively. The overall budget request is well above the discretionary spending levels set by the Budget Control Act (“sequestration”). AST highlights include: (1) the second year of DKIST operations ramp and ALMA held flat; (2) NOAO reduced scope, special projects on Mayall and WIYN; (3) significant increase in MSIP (\$13 million to \$18.72 million); and (4) AAG would decrease several million dollars

Paul Hertz provided an update on NASA activities since the 28-29 January meeting. The FY 2015 appropriation (\$685M for Astrophysics, \$645M for JWST) and FY 2016 PBR (\$689M for Astrophysics, \$620M for JWST) provide funding for NASA astrophysics to continue its programs, missions, and projects as planned. The operating missions continue to generate important and compelling science results, and new missions are under development for the future. Chandra, Fermi, Hubble, Kepler, NuSTAR, SOFIA, Spitzer, Swift, and XMM-Newton continued following the 2014 Senior Review. The budget request funds development of Explorer missions TESS and NICER. TESS will continue the search for exoplanets, scanning all of the sky for Exoplanets closer to Earth than those found by Kepler. The budget will support pre-formulation studies for WFIRST/AFTA and maintain a competed astrophysics research program and support of the balloon program. The budget supports the commitment of an October 2018 launch date for JWST. The budget includes STEM activities for the Science Mission Directorate. The budget supports full funding for SOFIA operations and places SOFIA into the 2016 Astrophysics Senior Review. Hubble operations are continued through FY 2020 providing overlap with JWST.

The remainder of the meeting was dedicated to a discussion of the Committee’s draft annual report due 15 March 2015. The report will contain a set of findings and recommendations. Ms. Pentecost will provide the Chair with the names and addresses of report recipients in a few weeks.

MEETING ADJOURNED AT 4:00 PM EST, 27 February 2015