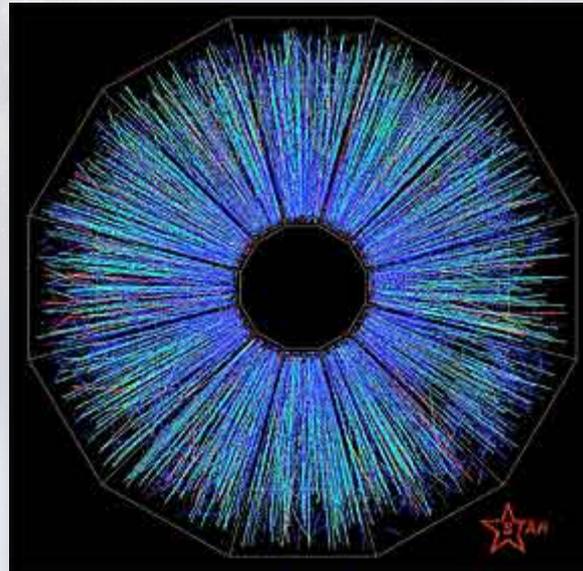
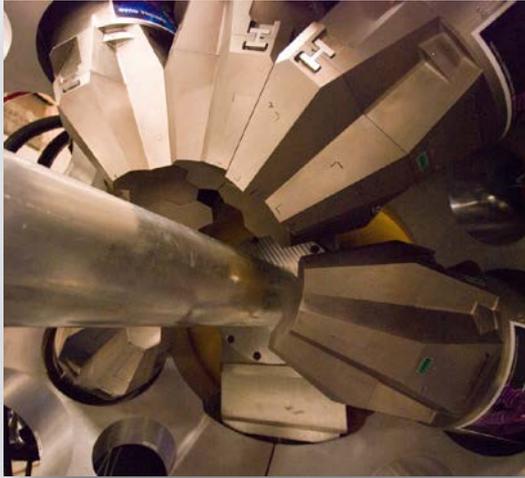




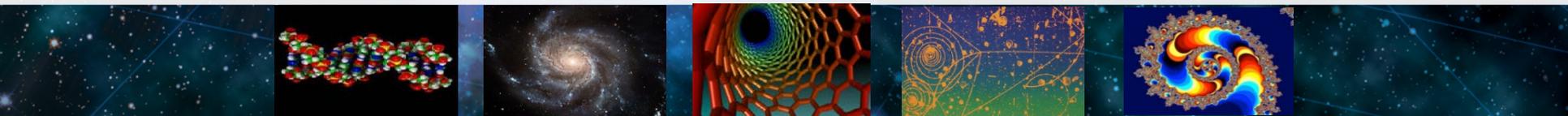
Mathematical and Physical Sciences Directorate

Nuclear Science Advisory Committee

December 19, 2013

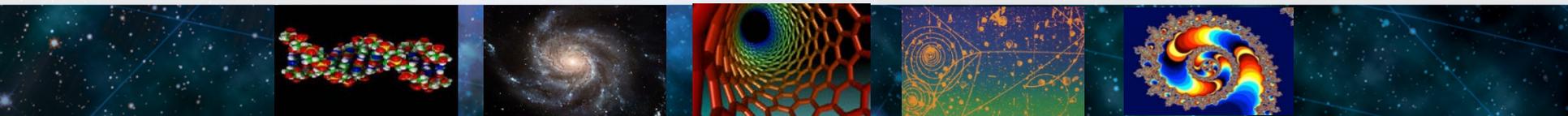
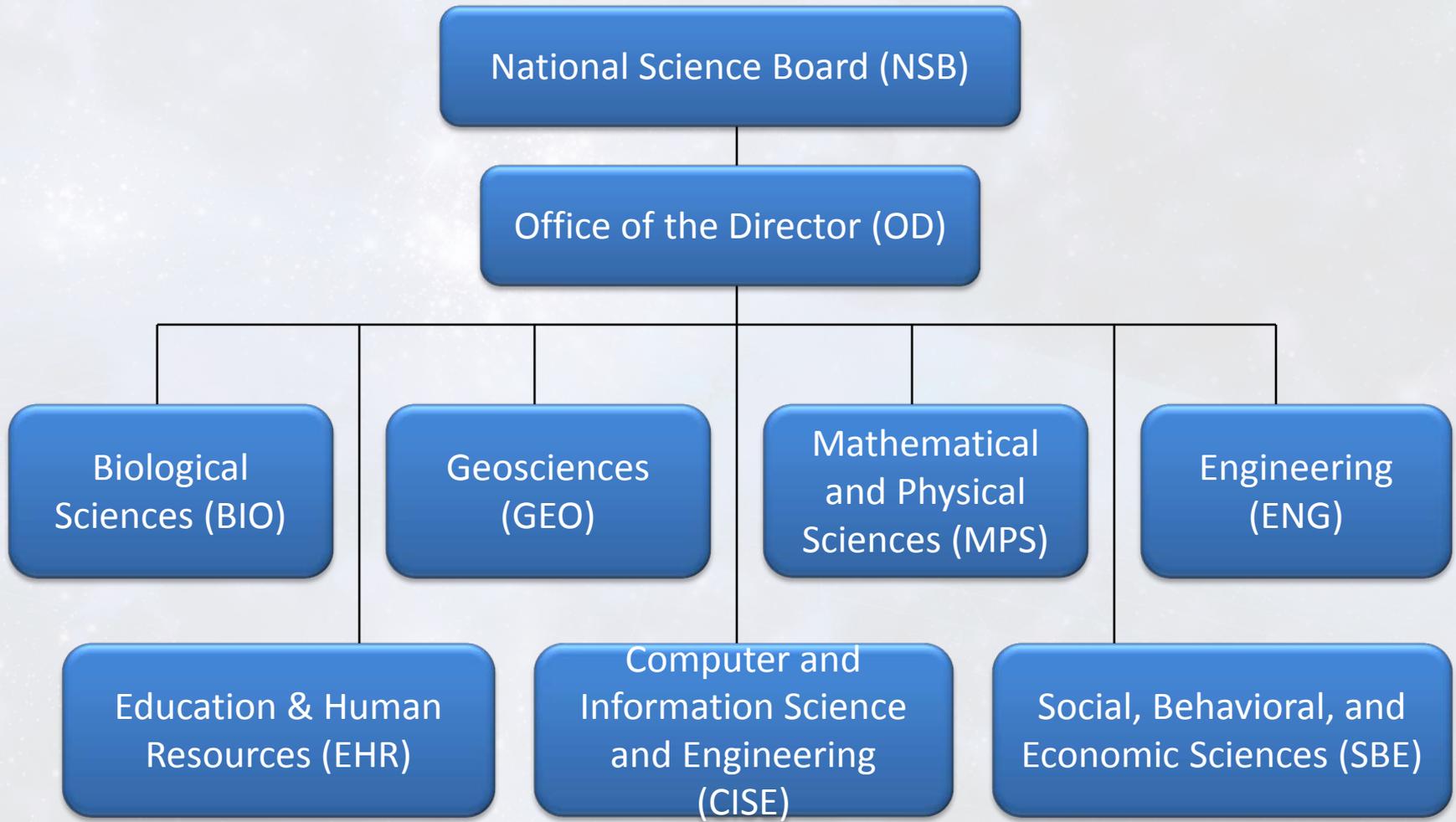


F. Fleming Crim
Assistant Director
National Science Foundation



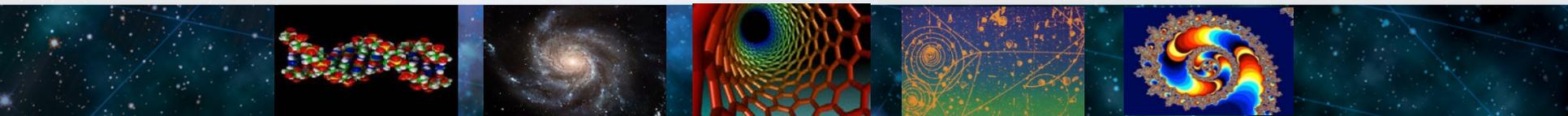
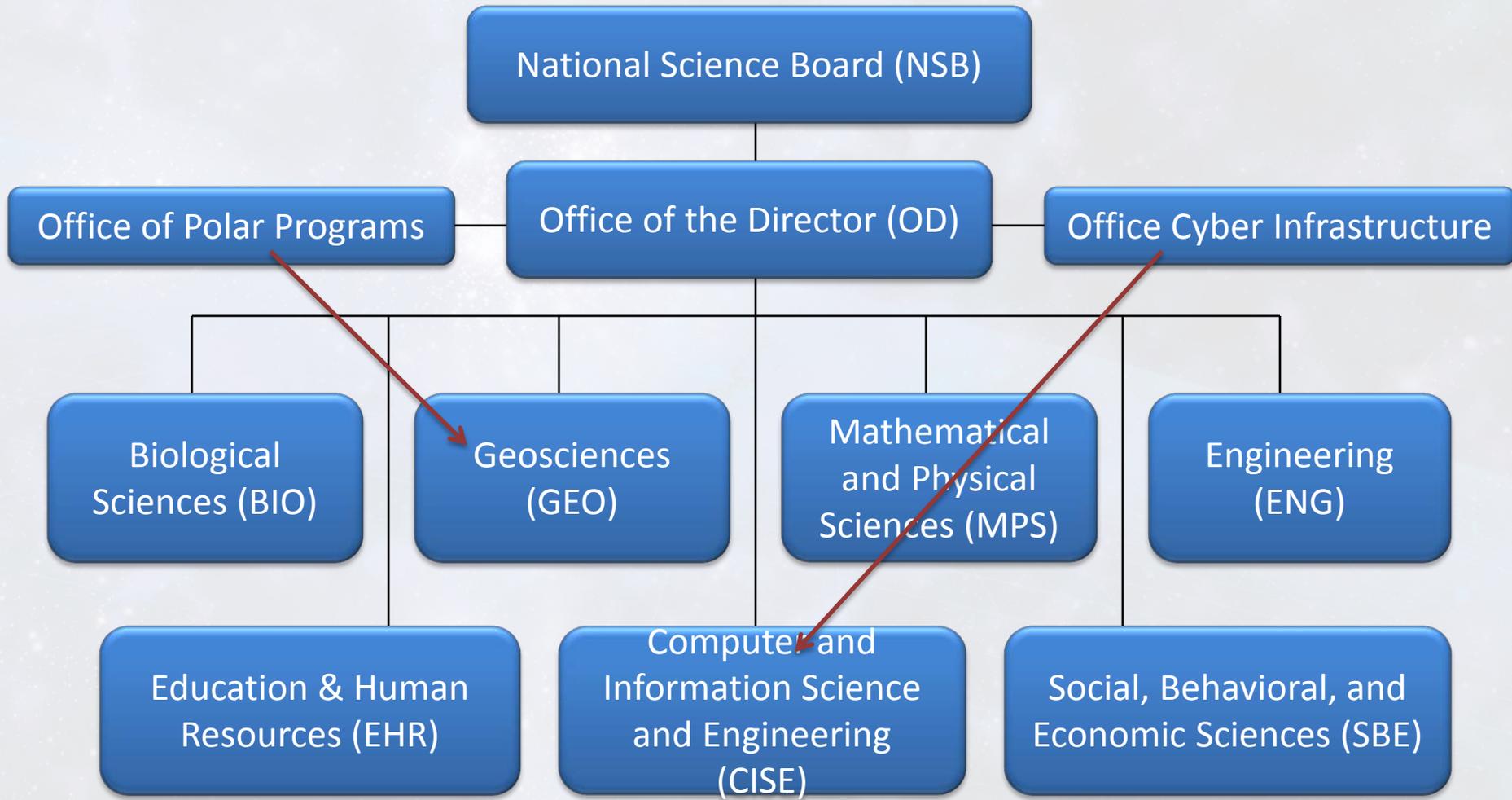


Mathematical and Physical Sciences Directorate



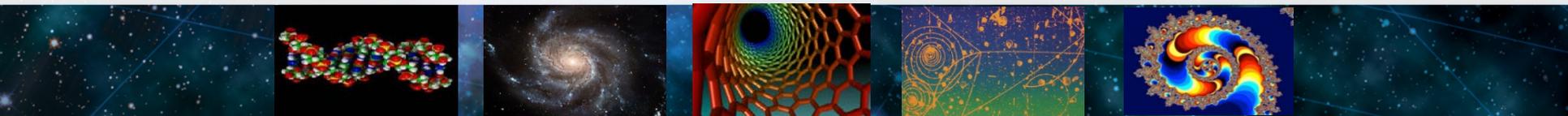
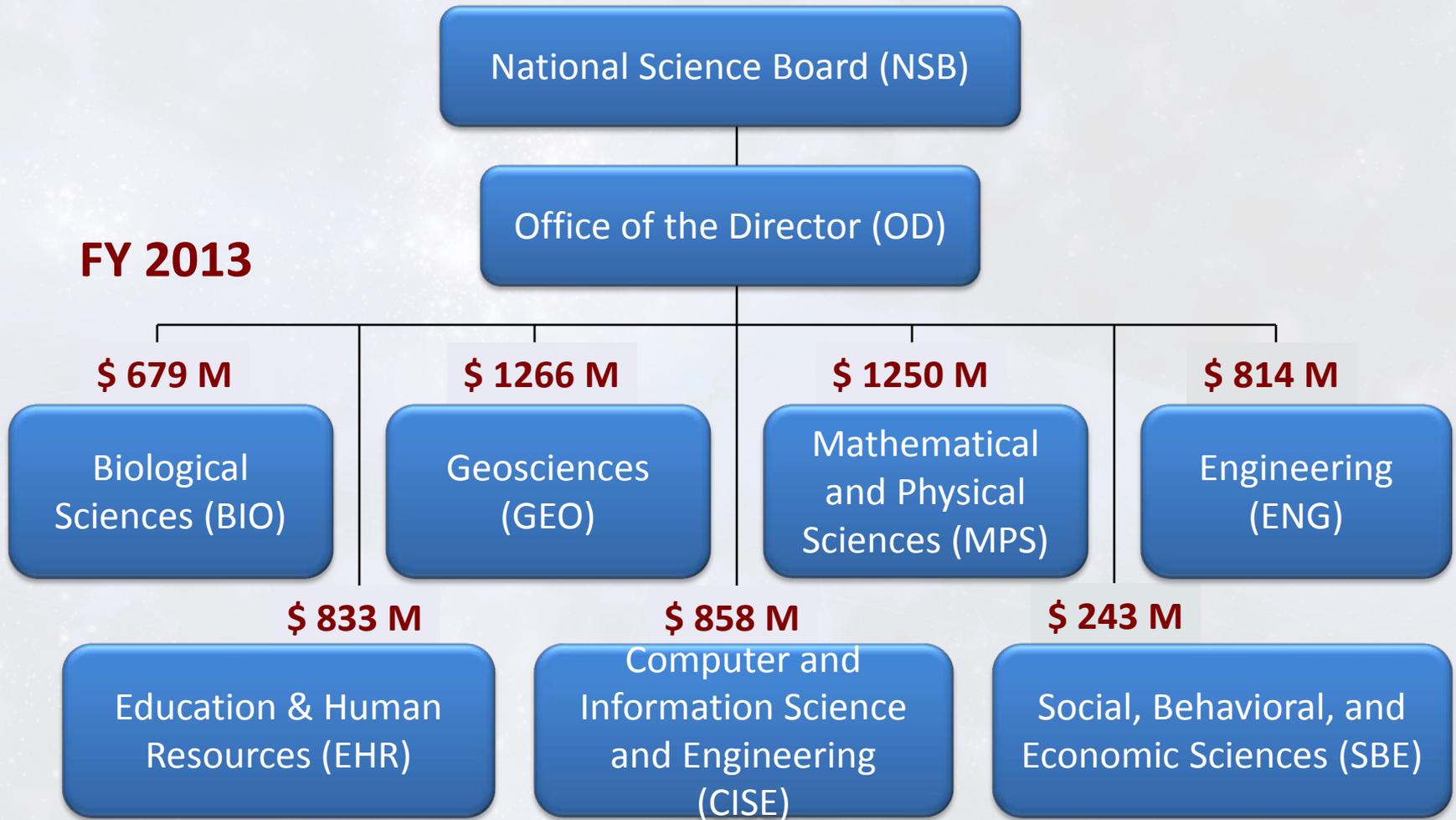


Mathematical and Physical Sciences Directorate



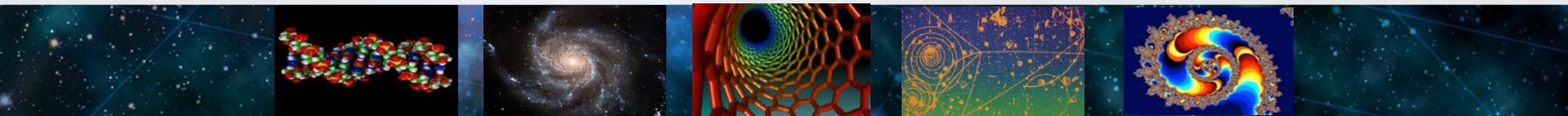
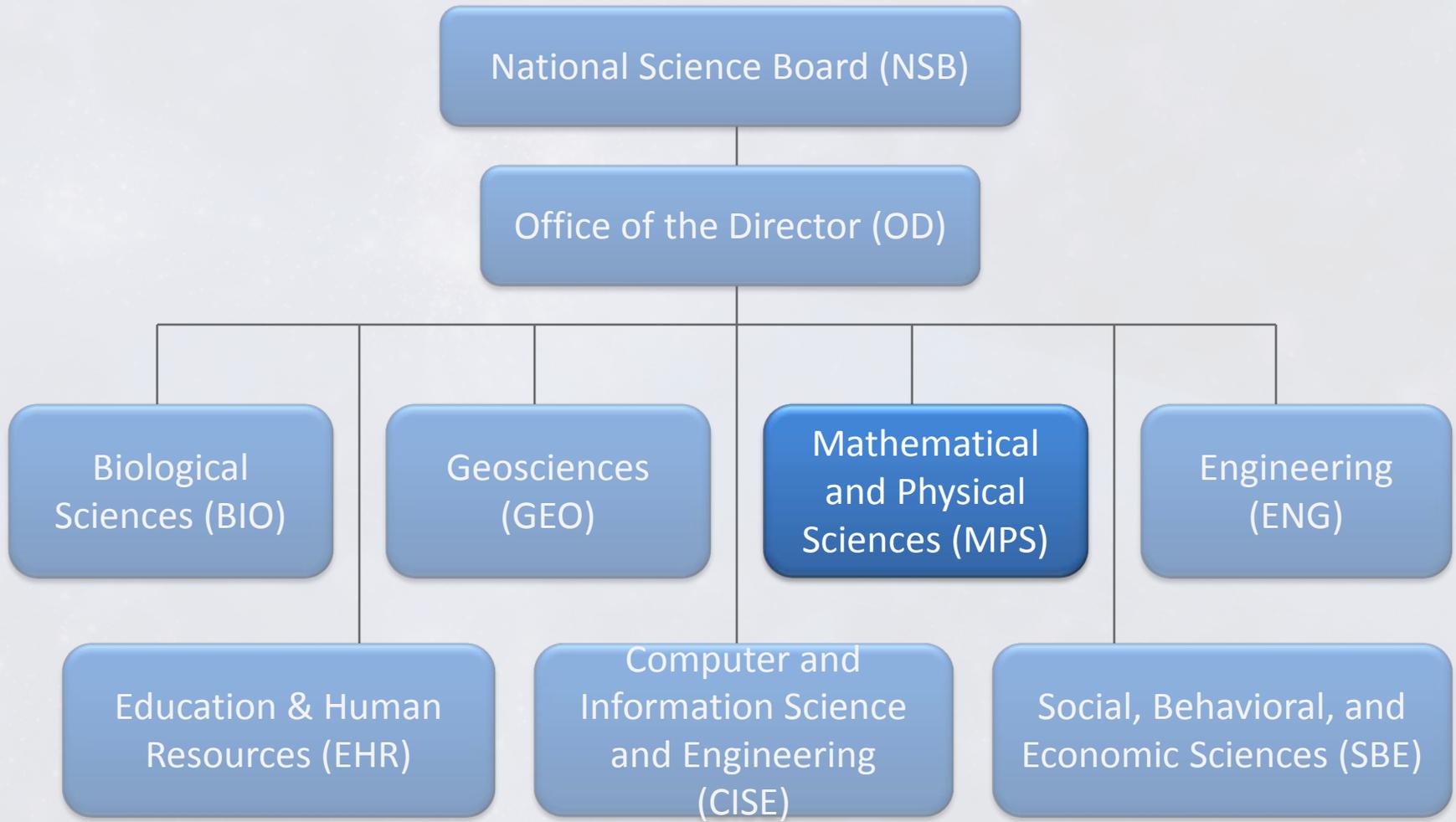


Mathematical and Physical Sciences Directorate



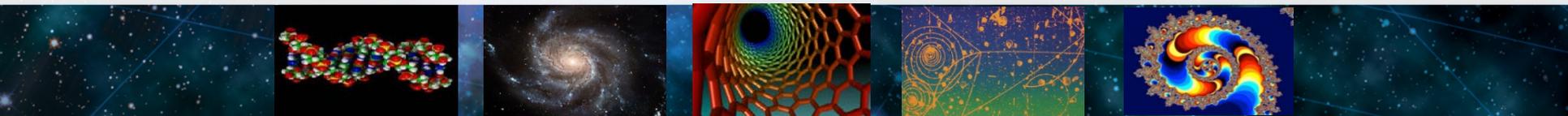


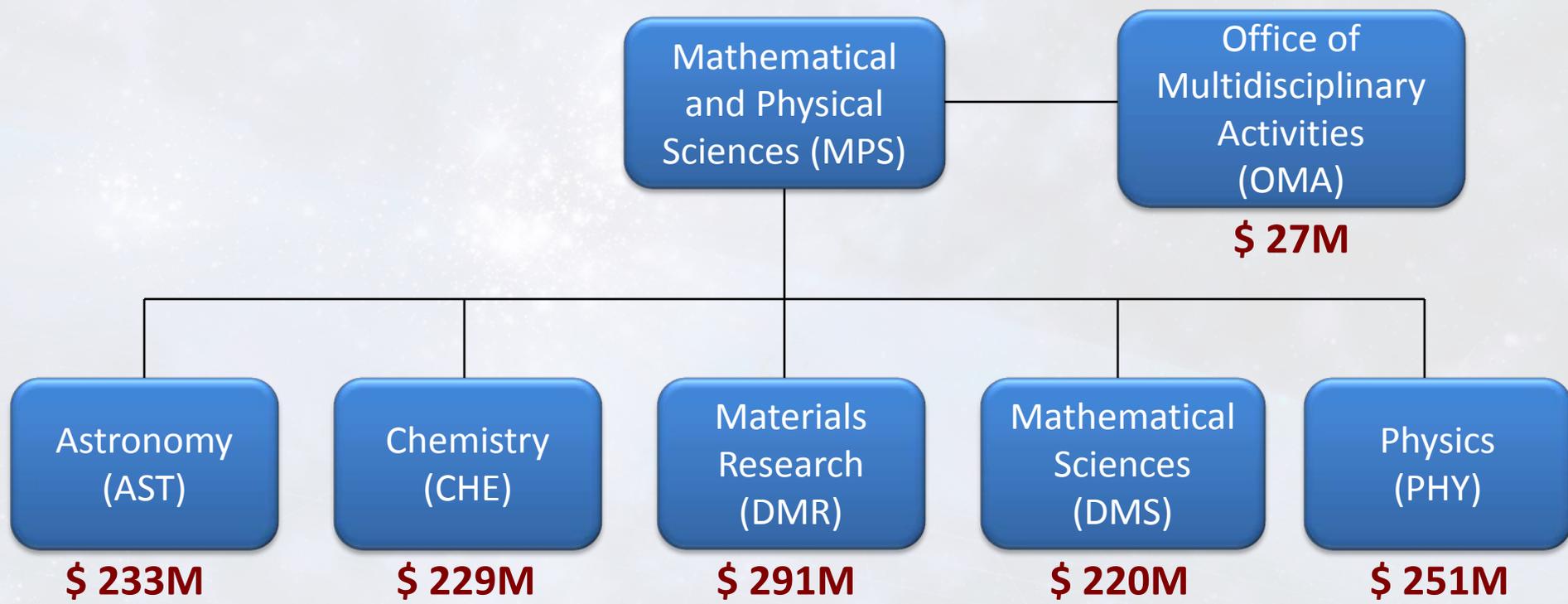
Mathematical and Physical Sciences Directorate



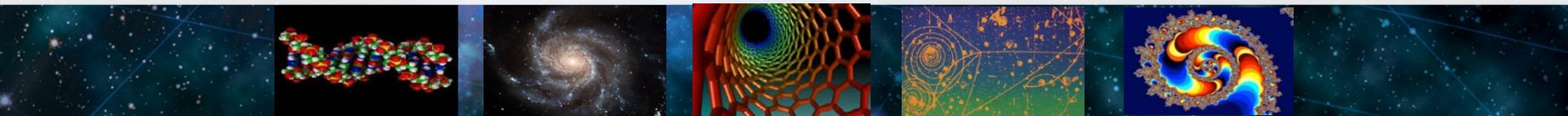


Mathematical
and Physical
Sciences (MPS)





FY 2013: \$ 1250M



Mathematical and Physical Sciences (MPS)

Astronomy
(AST)

\$ 233M

Chemistry
(CHE)

\$ 229M

Materials
Research
(DMR)

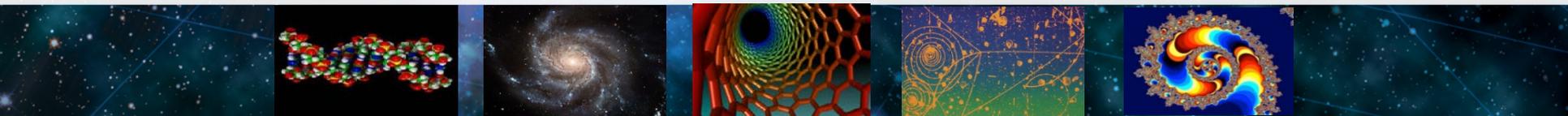
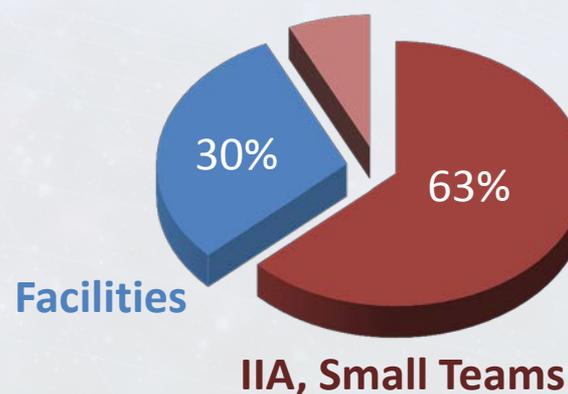
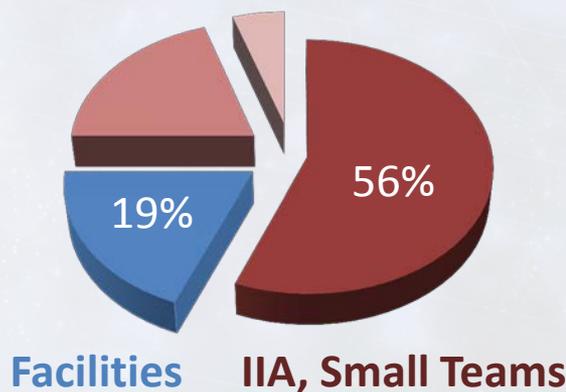
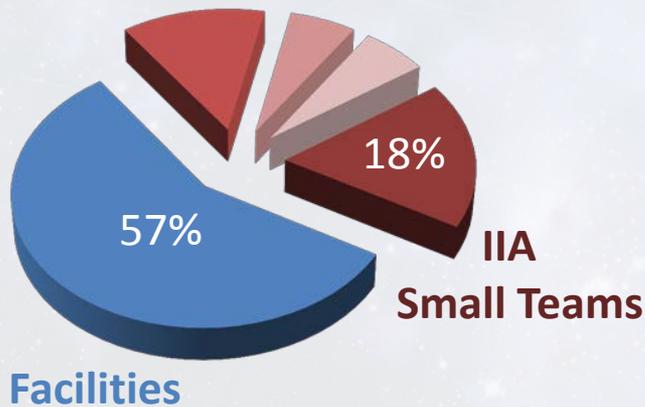
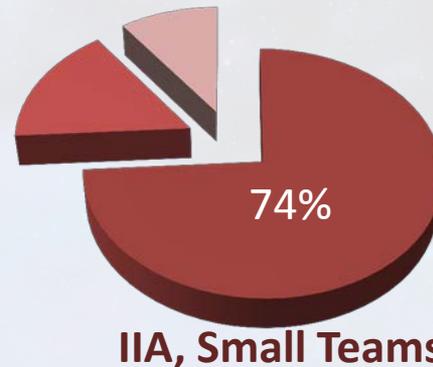
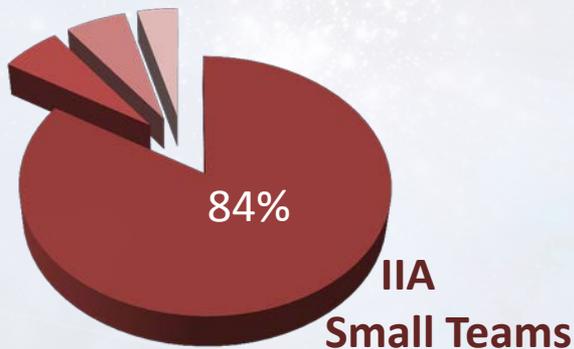
\$ 291M

Mathematics
(DMS)

\$ 220M

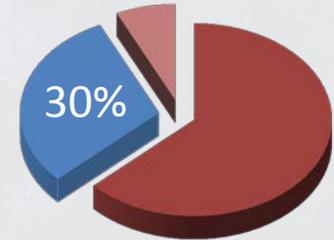
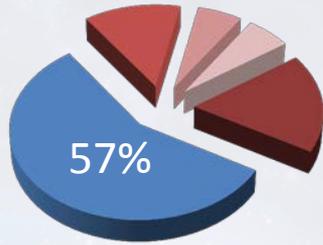
Physics
(PHY)

\$ 251M



Astronomy (AST)

- Advanced Technology Solar Telescope (ATST)
 - Arecibo Observatory
- Atacama Large Millimeter Array (ALMA)
 - Gemini Observatory
- Large Synoptic Survey Telescope (LSST)
- National Optical Astronomical Observatory (NOAO)
- National Radio Astronomy Observatory (NRAO)
 - National Solar Observatory (NSO)

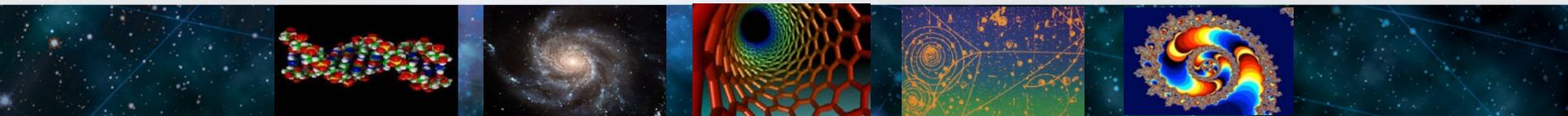
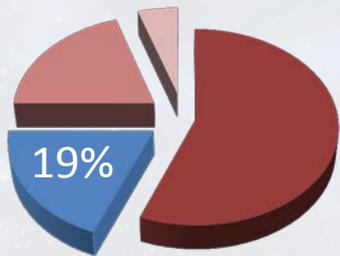


Physics (PHY)

- Ice Cube Neutrino Observatory
 - Large Hadron Collider (LHC)
- Laser Interferometer Gravity-wave Observatory (LIGO)
 - National Superconducting Cyclotron Laboratory (NSCL)

Materials Research (DMR)

- Cornell High Energy Synchrotron Source (CHESS)
 - National High Magnetic Field Laboratory (NHMFL)
- National Nanotechnology Infrastructure Network (NNIN)





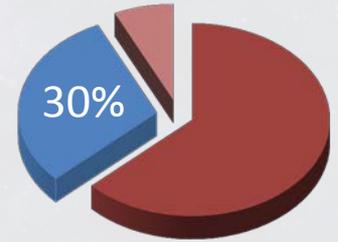
IceCube

LHC



LIGO

NSCL



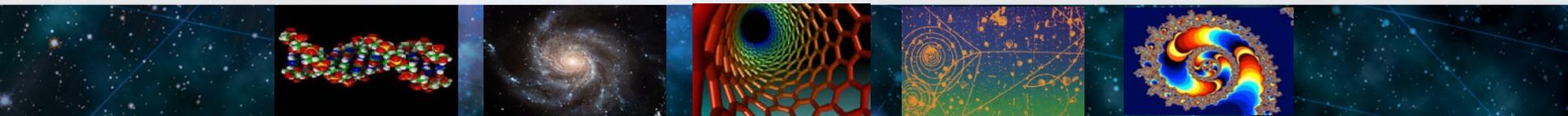
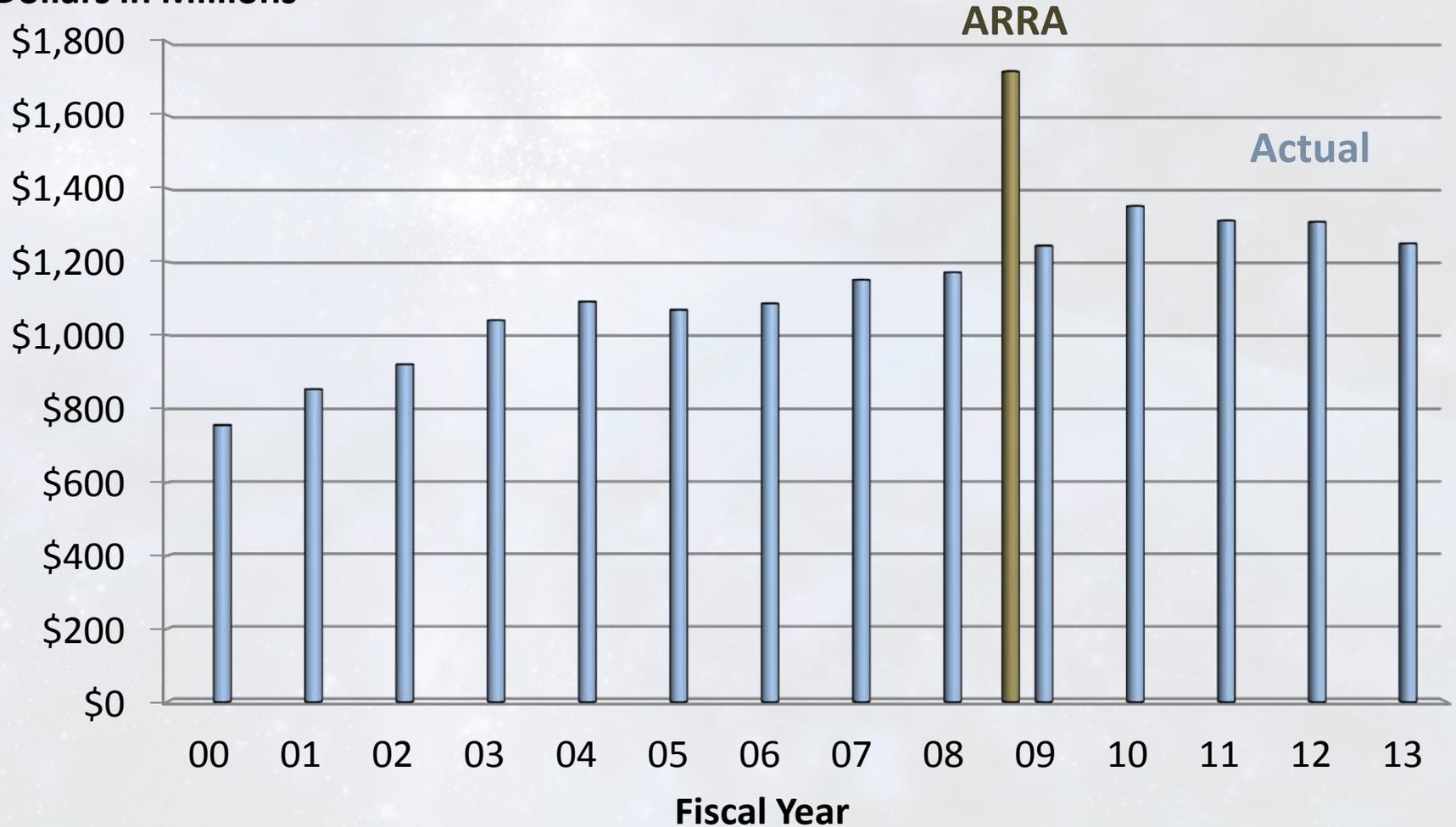
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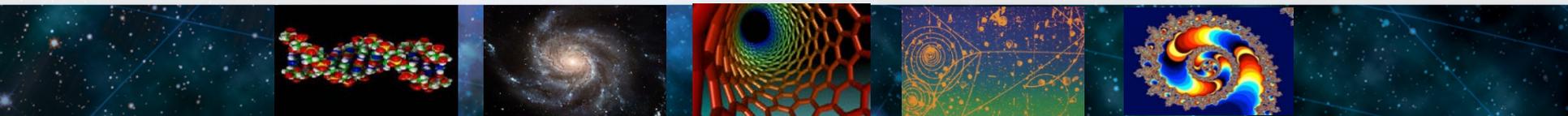
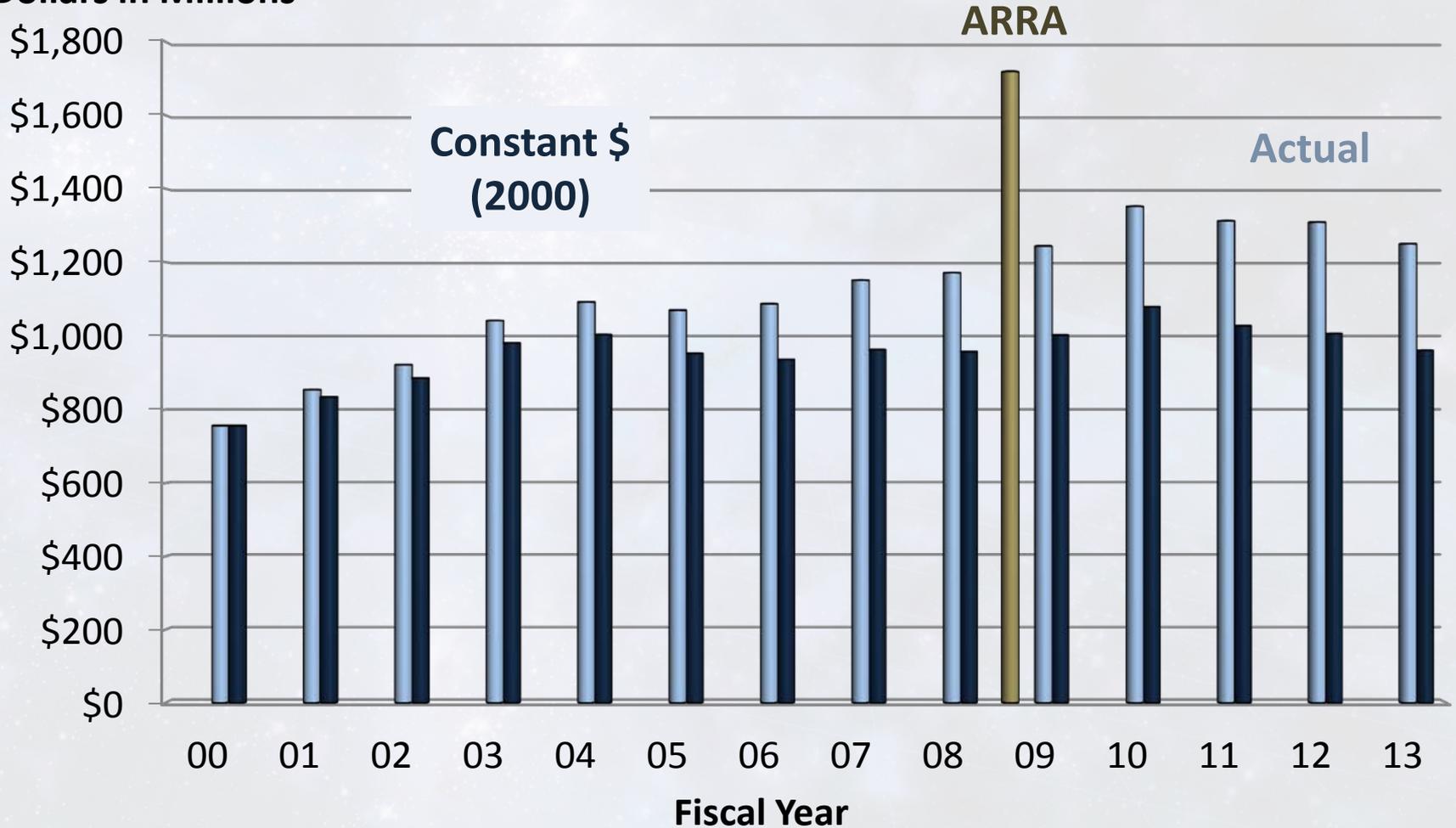
Funding remains “flat” for MPS...

Dollars in Millions

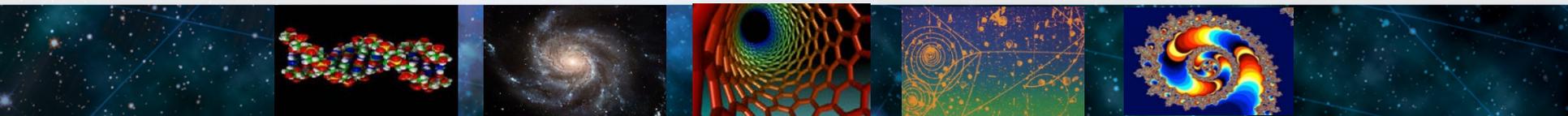
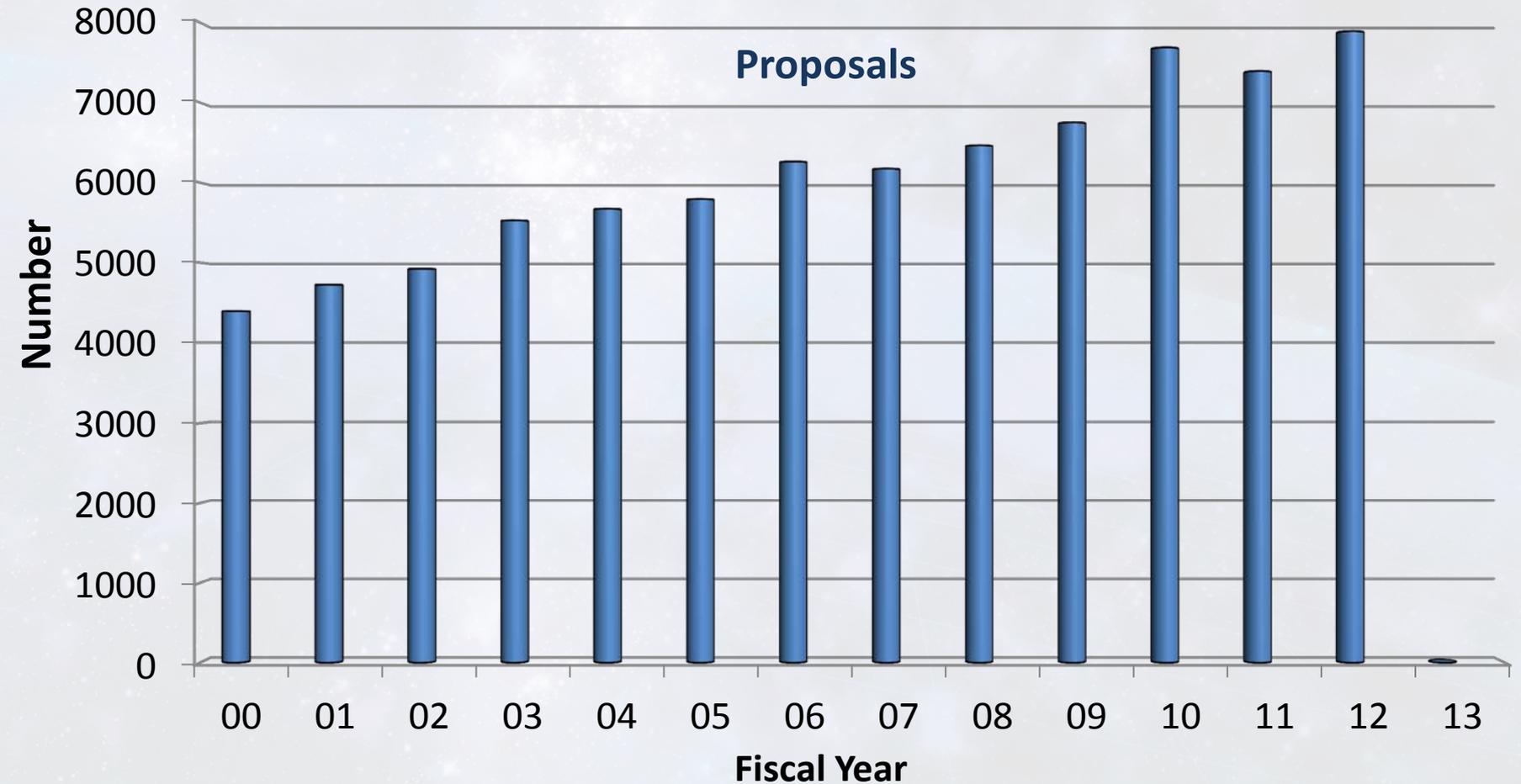


Funding remains “flat” for MPS...

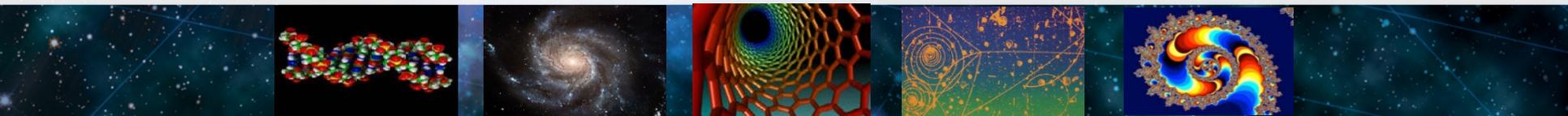
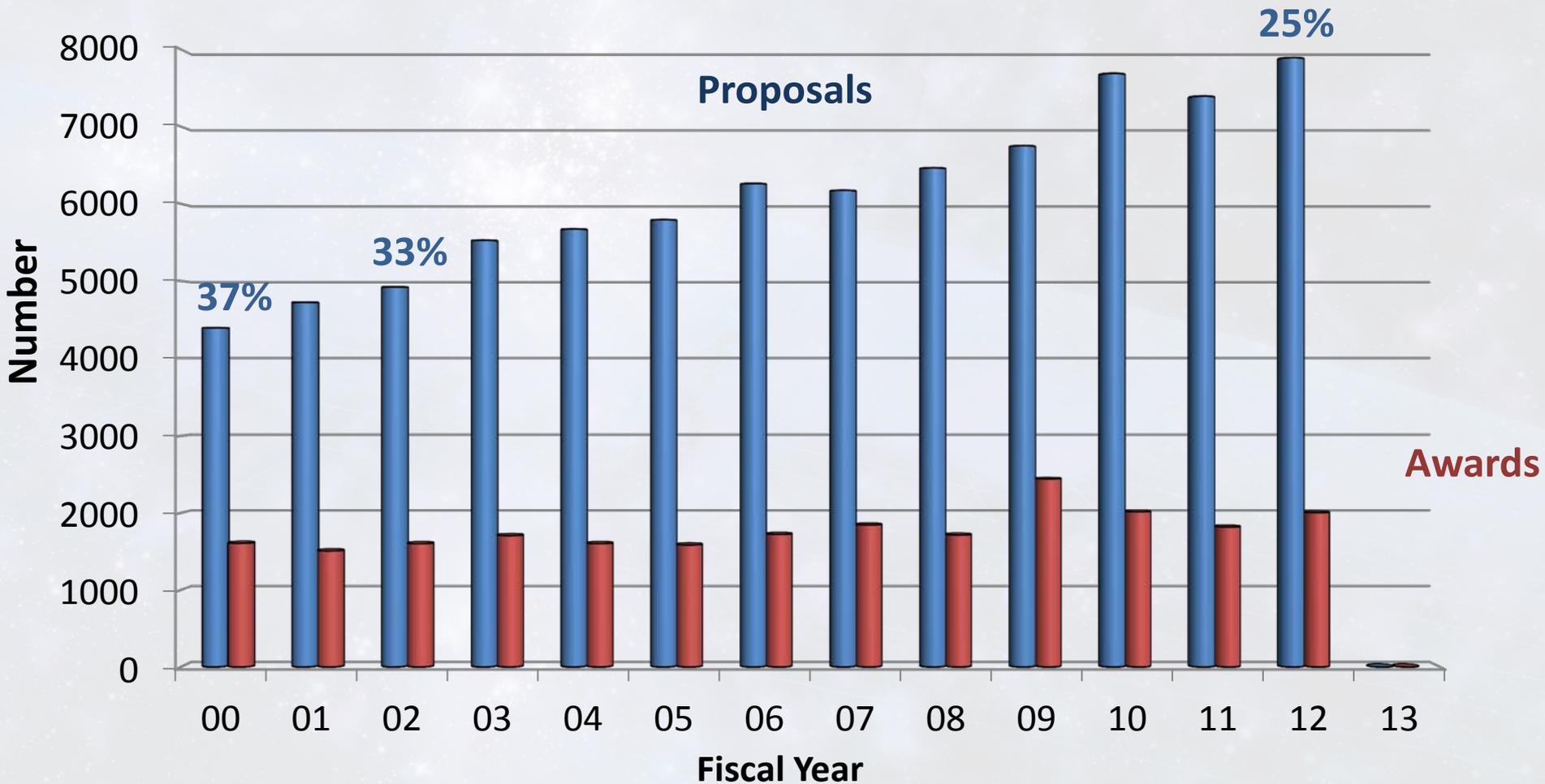
Dollars in Millions



... while the number of proposals rises ...

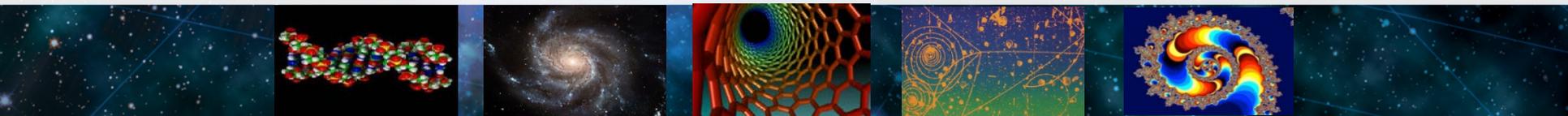
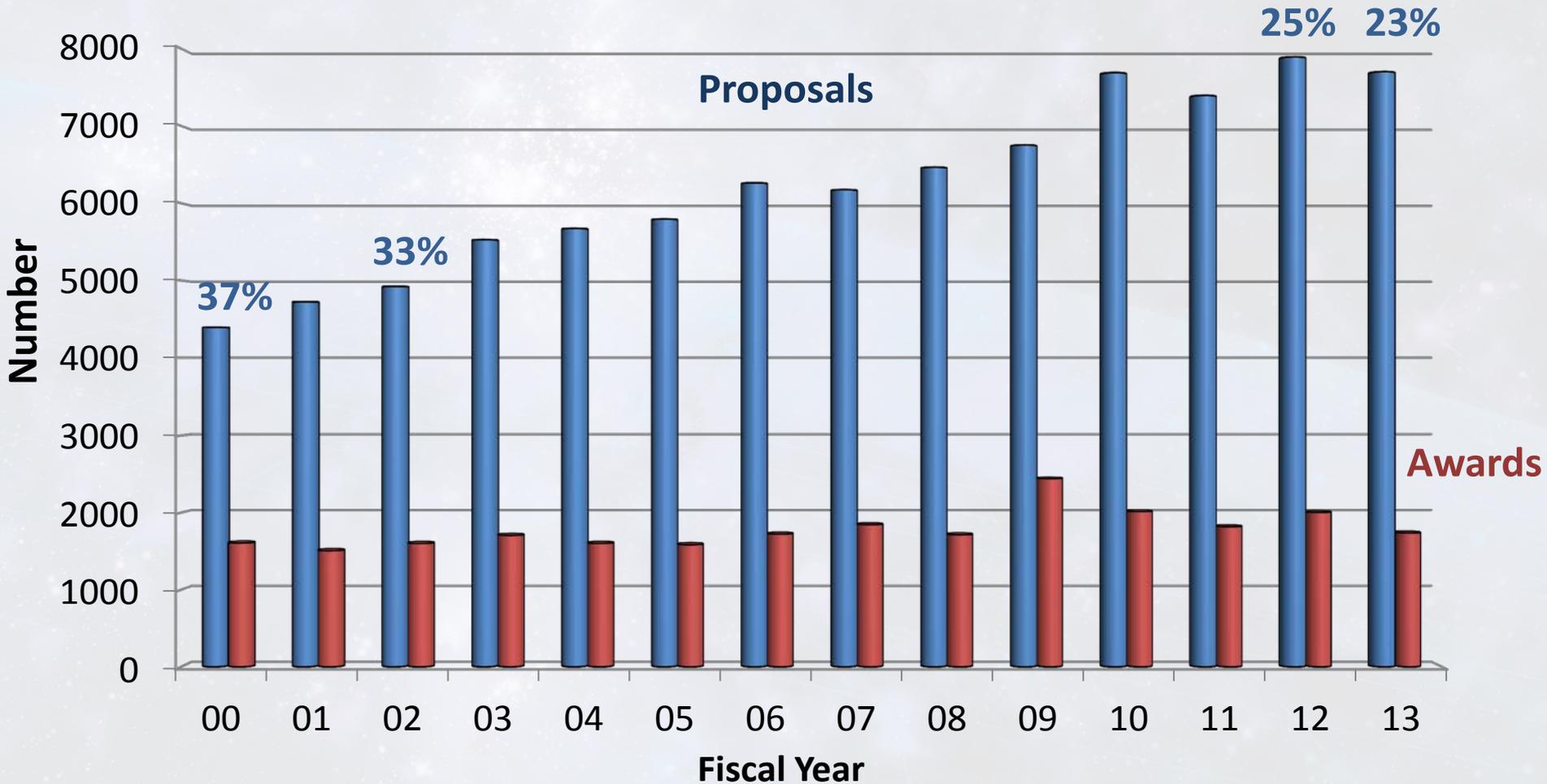


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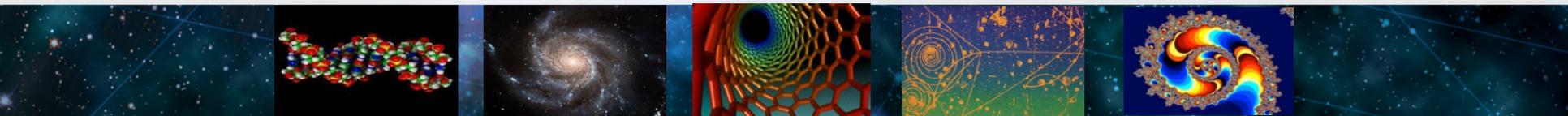
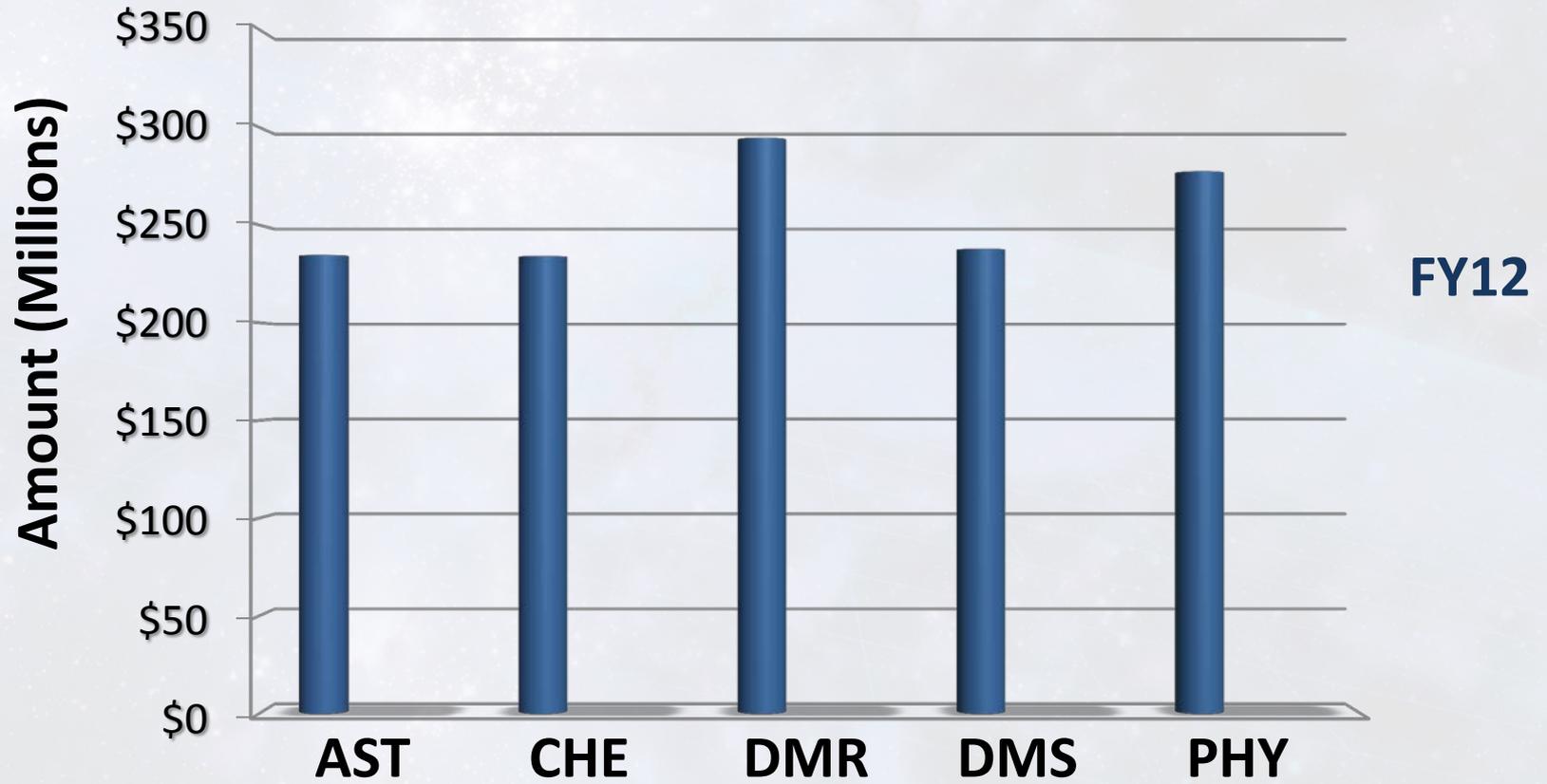


... and sequestration reduces the number of awards

(258 fewer in FY 2013)



FY 2012
\$ 1309 M

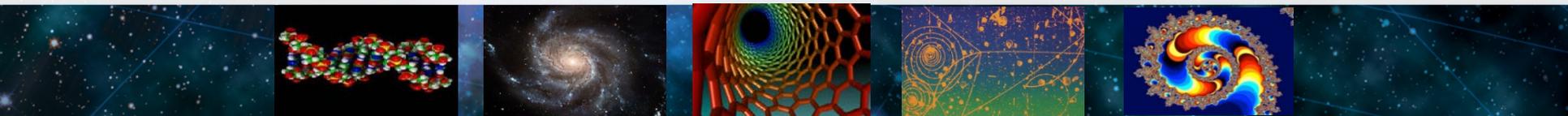
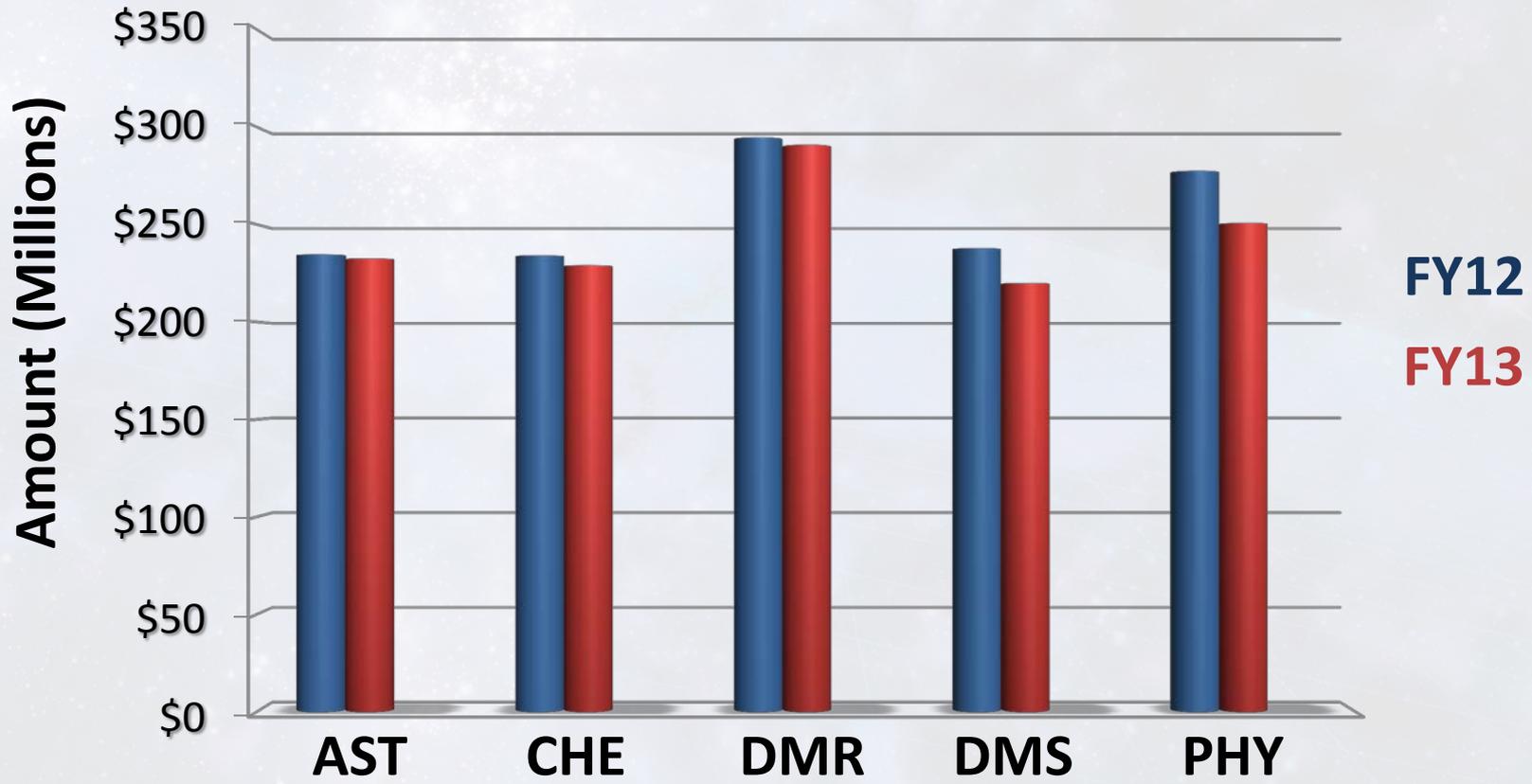




FY 2012
\$ 1309 M

- 4.5%
➔

FY 2013
\$ 1250 M





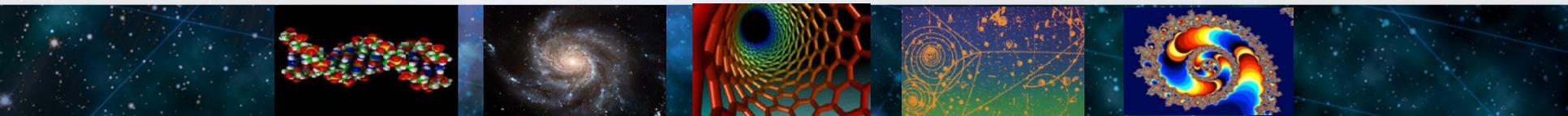
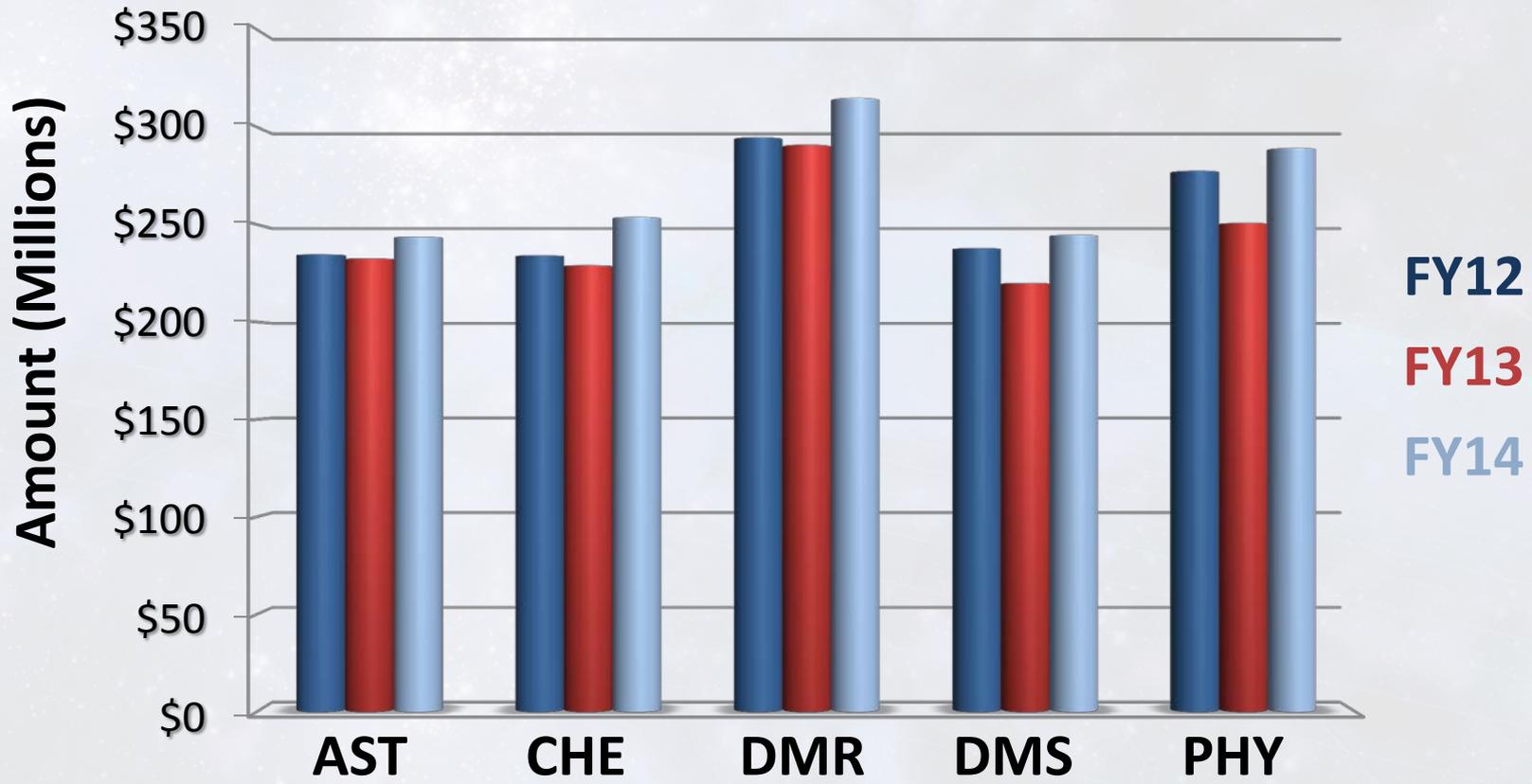
FY 2012
\$ 1309 M

- 4.5%
→

FY 2013
\$ 1250 M

10.9%
→

FY 2014
\$ 1386 M
(Request)



On Our Minds

New Budget Realities

- Flat Budgets, Zero-sum game?



Issues and Community Priorities

- NSCL → FRIB
- Midscale Instrumentation
- Strong NSF DOE partnership



Major Research Equipment and Facilities Construction (MREFC)

- Near-term budget committed
- Longer-term projects must be compelling for the Foundation and the science
 - Operation costs in future years

