Restructuring Planetary Science's Research & Analysis Program

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Guiding Principles in the Restructuring

- To make the structure of the R&A program explainable to those outside of NASA.
- To make it easy for those outside of NASA to compute the amount of money spent on grants.
- To reduce the time between proposal submission and award announcement.
- To encourage interdisciplinary research.
- To enable PSD strategic decision making.
- To be more flexible in responding to changing research priorities.
- To reduce overlaps between program elements.

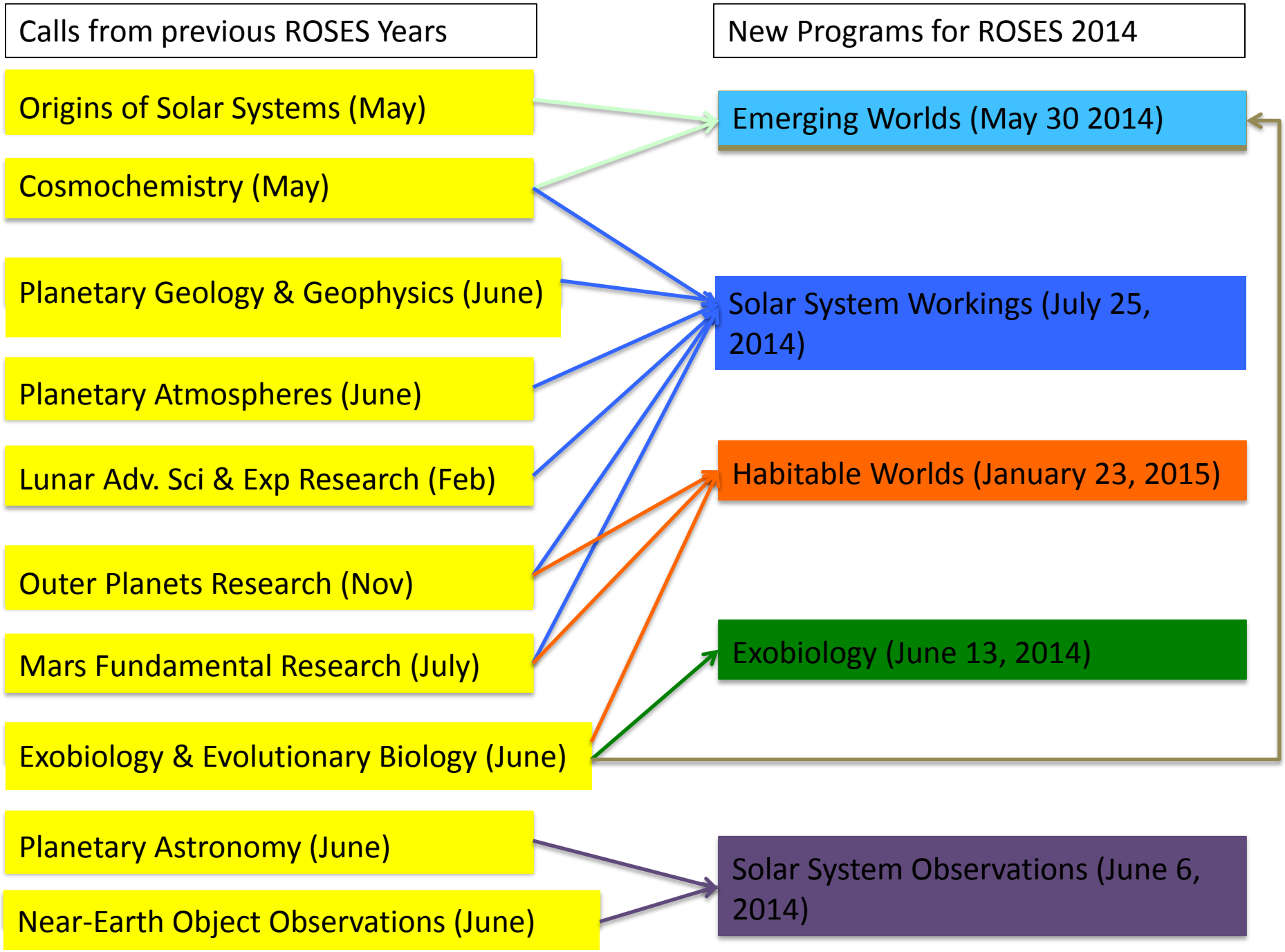
- To provide bridge funding, where appropriate, to cover funding gaps resulting from this restructuring
- Ensure program restructuring will be revenue neutral; removing overlap ***will not decrease the R&A budget***

Reorganization at a glance

- ROSES13 has 20 calls; ROSES14 will have 19 calls with 7 that remain the same
- All calls address division science goals supporting NASA's strategic plan
- Strategic programs are more narrow in scope and address certain strategic needs
- Focused programs are narrow in scope and limited in time. They may be called for only one year or several, but not indefinitely. This provides flexibility the previous program did not have.

Core Research	Strategic	Focused
Emerging Worlds	PDART (data archiving, tools)	ETIPS (emerging topics)
Solar System Workings	PSTAR (analogues)	LDAP (lunar data analysis)
Habitable Worlds	Exoplanets (joint with Astro)	CDAPS
Exobiology	DDAP	DFRAP
Solar System Observations	LARS	
Core Technology	MDAP	
MatISSE	Planetary Protection	
PICASSO	NAI (not solicited in ROSES)	
Planetary Major Equipment	SSERVI (not solicited in ROSES)	

New program
Not solicited in ROSES 2014
Unchanged


Calls from previous ROSES Years
New Programs for ROSES 2014
Origins of Solar Systems (May)
Cosmochemistry (May)
Planetary Geology & Geophysics (June)
Planetary Atmospheres (June)
Lunar Adv. Sci & Exp Research (Feb)
Outer Planets Research (Nov)
Mars Fundamental Research (July)
Exobiology & Evolutionary Biology (June)
Planetary Astronomy (June)
Near-Earth Object Observations (June)
Emerging Worlds (May 30 2014)
Solar System Workings (July 25, 2014)
Habitable Worlds (January 23, 2015)
Exobiology (June 13, 2014)
Solar System Observations (June 6, 2014)

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ROSES 2014 Planetary Due Dates

Program Element	Step-1 Proposal Due Date	Step-2 Proposal Due Date
Exoplanets	March 31, 2014	May 23, 2014
Emerging Worlds	March 31, 2014	May 30 2014
PPR	April 7, 2014	June 6, 2014
Solar System Observations	April 7, 2014	June 6, 2014
Exobiology	April 14, 2014	June 13, 2014
MatISSE	April 21, 2014	June 20, 2014
LARS	April 28, 2014	June 27, 2014
Hayabusa 2 PSP	May 19, 2014	July 18, 2014
Solar System Workings	May 27, 2014	July 25 2014
PSTAR	June 23, 2014	August 22, 2014
PDART	July 14, 2014	September 12, 2014
DDAP	July 21, 2014	September 19, 2014
CDAP	July 28, 2014	September 26, 2014
MDAP	August 4, 2014	October 3, 2014
LDAP	August 11, 2014	October 10, 2014
DFRAP	August 18, 2014	October 17, 2014
PICASSO	September 15, 2014	November 14, 2014
Habitable Worlds	November 24, 2014	January 23, 2015

NASA's Intent for SSERVI

SSERVI was created to further the goals of science and exploration by addressing fundamental and applied science questions and human spaceflight concerns, i.e., to bring science to bear on issues related to potential targets for human exploration.

- Science which enables human exploration
- Science enabled by human exploration

SSERVI is funded jointly by SMD/PSD and HEOMD/AES through the Joint Robotic Precursor Activity (JRPA)

- Important opportunity to advance joint goals

The NASA virtual institute structure is uniquely suited to create and foster inter-team, as well as interdisciplinary, collaborations (e.g. heliophysics and geology) that previously would not have existed. Therefore, expansion of the NASA Lunar Science Institute's scope to include all potential near-term human destinations (Moon, NEAs, Phobos/Deimos) is the most effective method of integrating science (SMD) and exploration (HEOMD) research goals.

SSERVI Selected Teams

- **Bill Bottke**, Southwest Research Institute. *"Institute for the Science of Exploration Targets: Origin, Evolution and Discovery"*
- **Dan Britt**, University of Central Florida. *"Center for Lunar and Asteroid Surface Science"*
- **Ben Bussey**, Applied Physics Lab, Johns Hopkins University. *"Volatiles, Regolith and Thermal Investigations Consortium For Exploration and Science (VORTICES)"*
- **Bill Farrell**, Goddard Space Flight Center. *"Dynamic Response of Environments at Asteroids, the Moon, and moons of Mars (DREAM2)"*
- **Tim Glotch**, Stony Brook University. *"Remote, In Situ and Synchrotron Studies for Science and Exploration"*
- **Jennifer Heldmann**, Ames Research Center, *"Field Investigations to Enable Solar System Science & Exploration"*
- **Mihaly Horanyi**, University of Colorado. *"Institute for Modeling Plasma, Atmospheres and Cosmic Dust (IMPACT)"*
- **David Kring**, Lunar and Planetary Institute. *"Inner Solar System Impact Processes"*
- **Carle Pieters**, Brown University. *"Evolution and Environment of Exploration Destinations: Science and Engineering Synergism (SEEED)"*

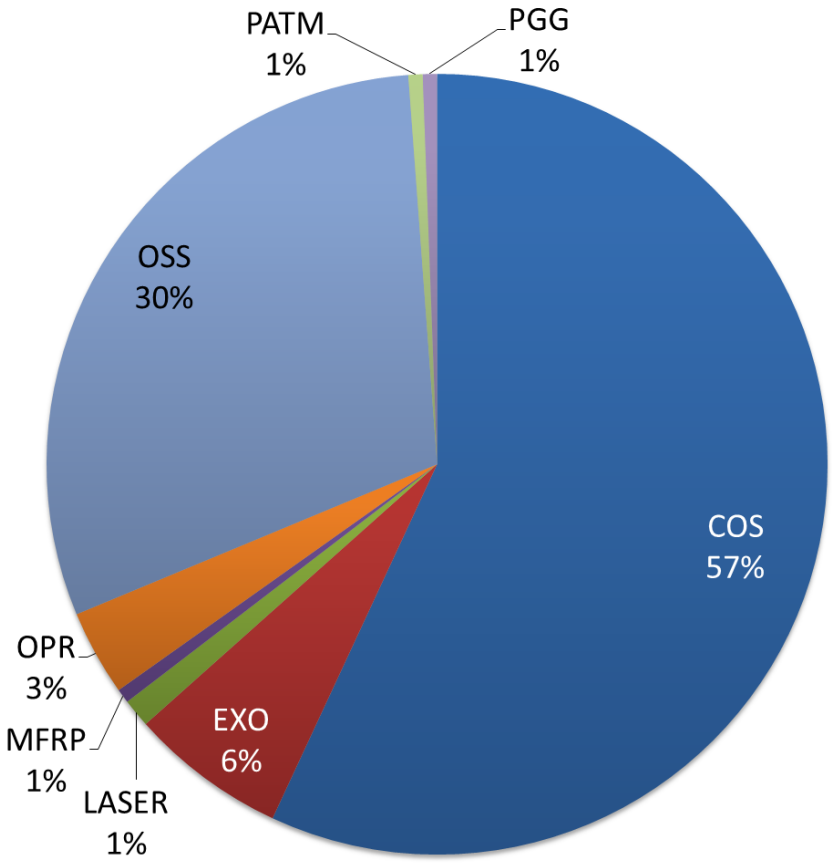
SSERVI Recommended Institute - Programmatic Balance

Back Up

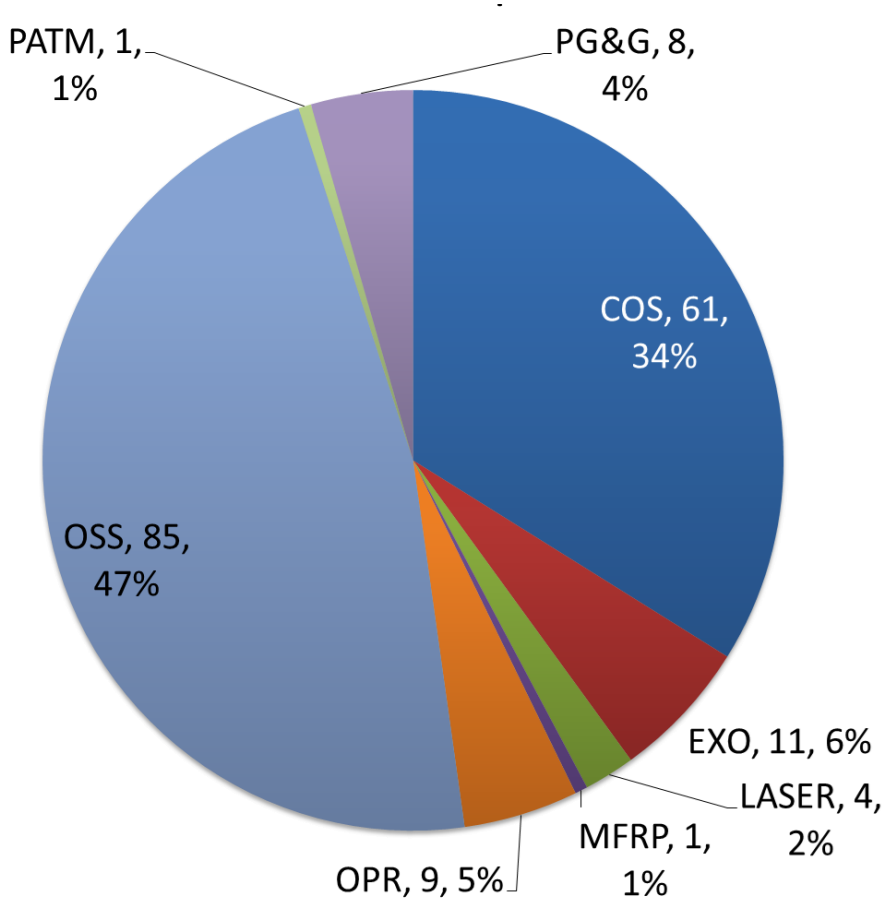
If FY13 activities and ROSES-11 proposals were mapped into the reorganized structure, what might have been the relative sizes and make-up of the core research programs last year?

WHAT GOES INTO EMERGING WORLDS?

Activities (≈Grants)

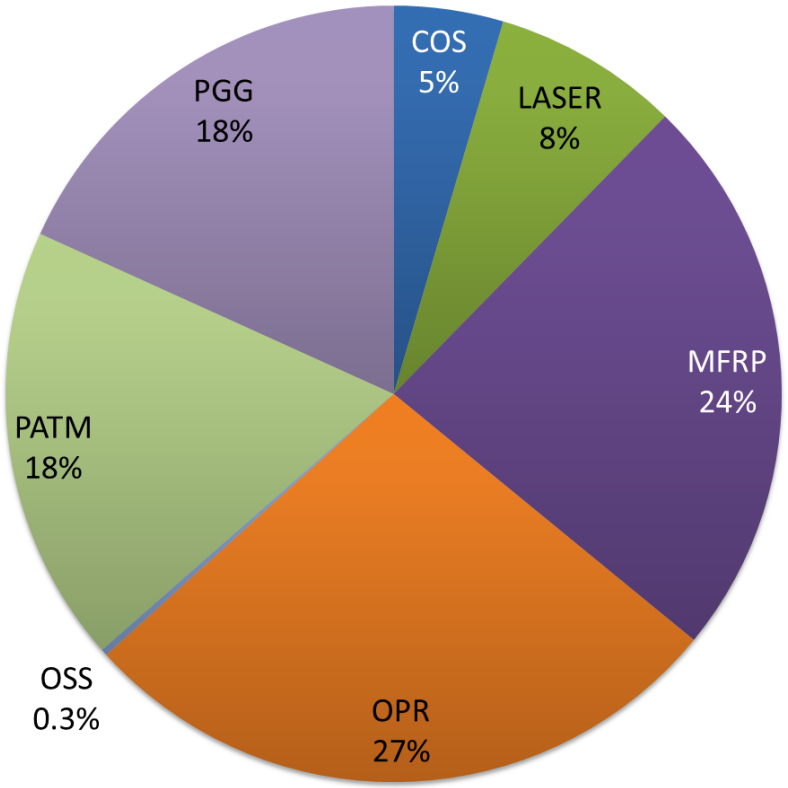


Proposals

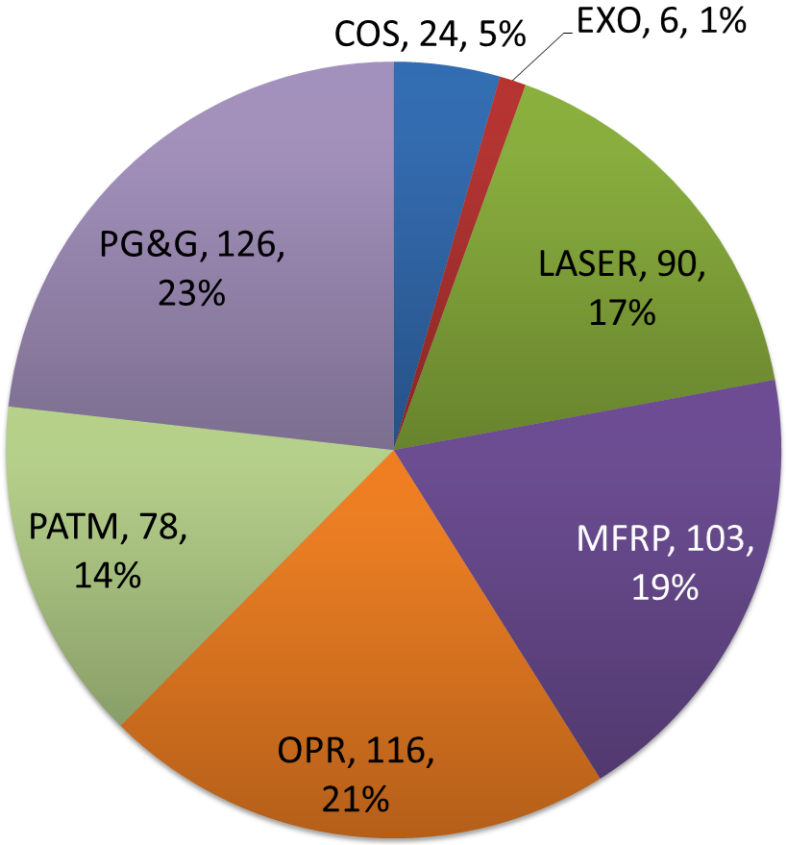


WHAT GOES INTO SOLAR SYSTEM WORKINGS?

Activities (≈Grants)

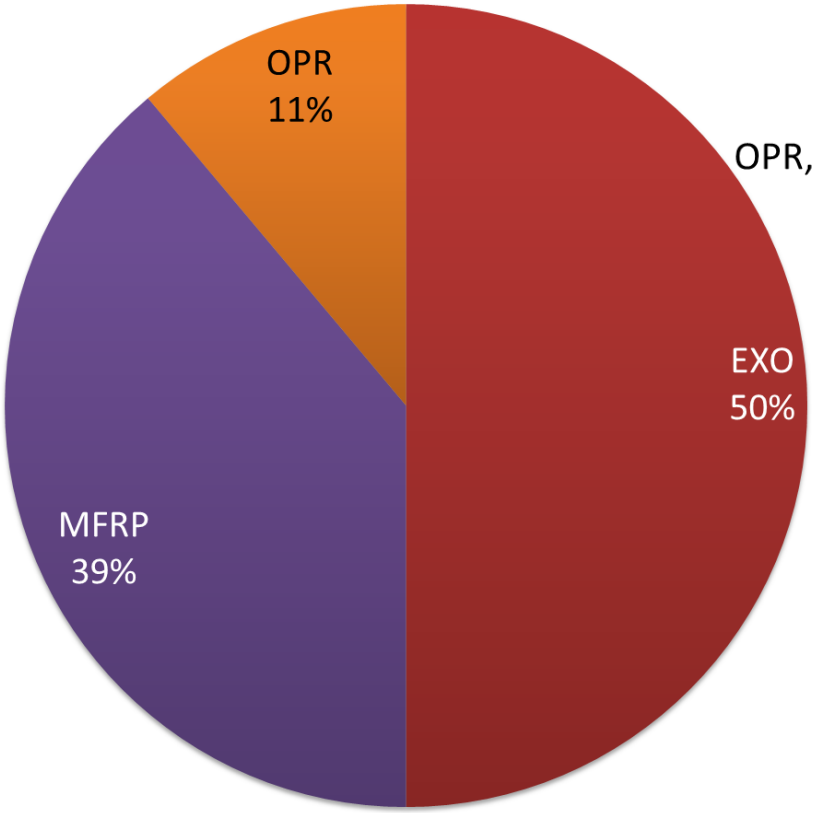


Proposals

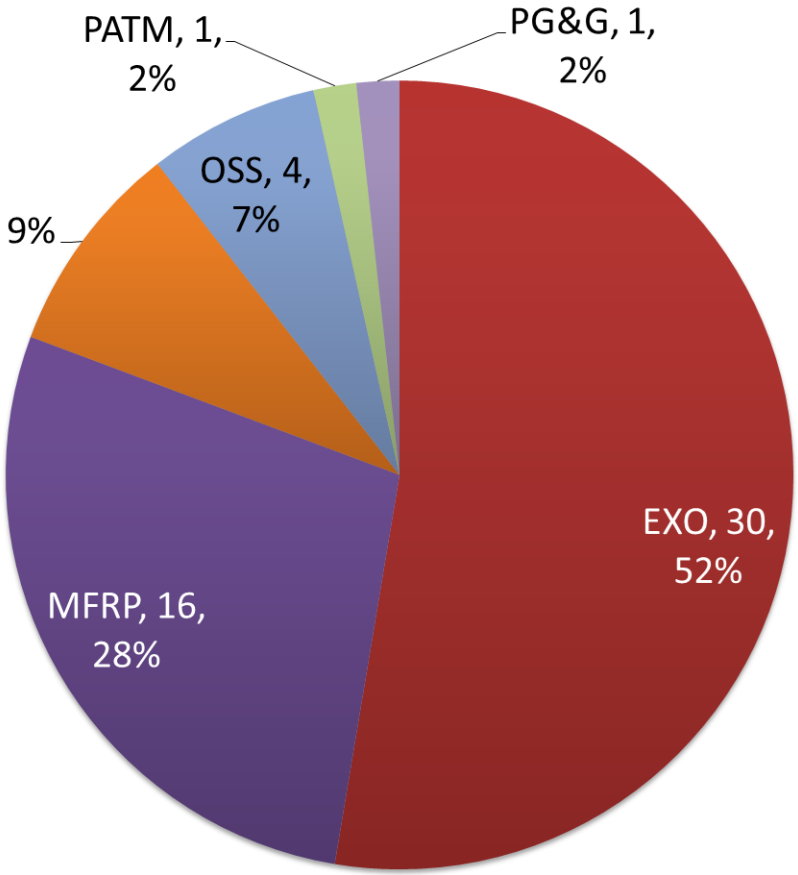


WHAT GOES INTO HABITABLE WORLDS?

Activities (≈Grants)

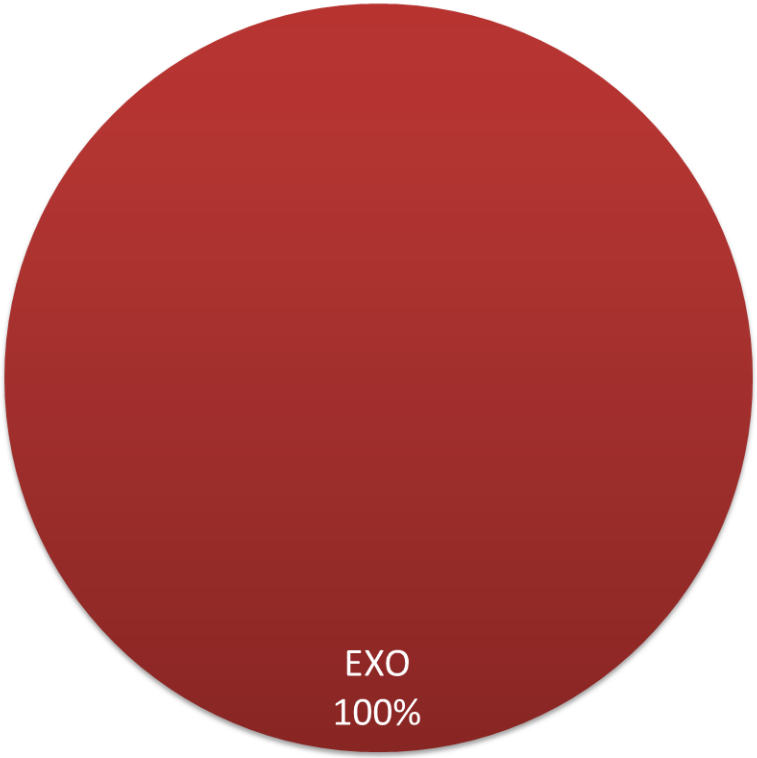


Proposals

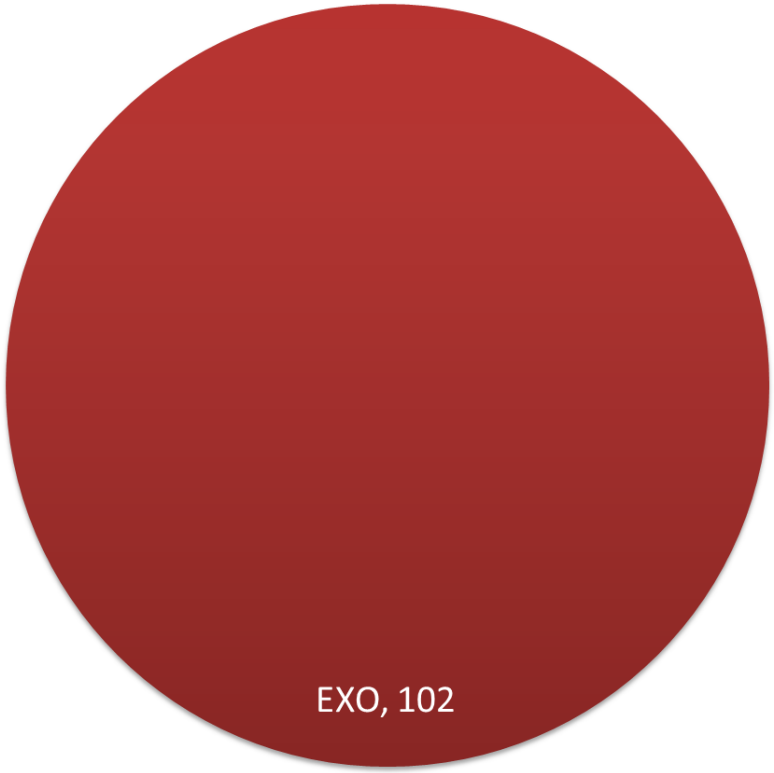


WHAT GOES INTO EXOBIOLOGY?

Activities (≈Grants)

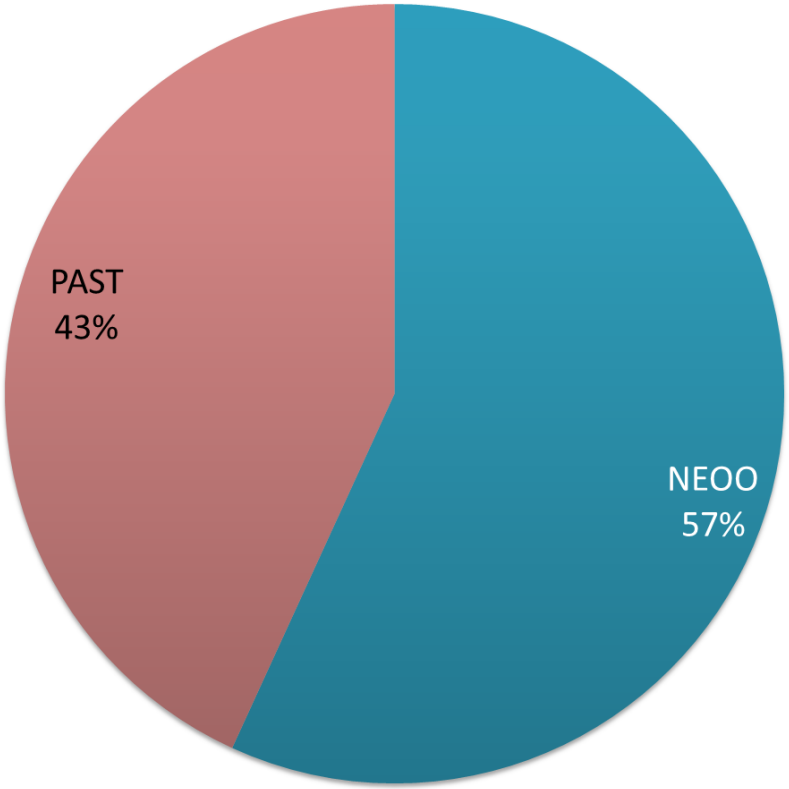


Proposals

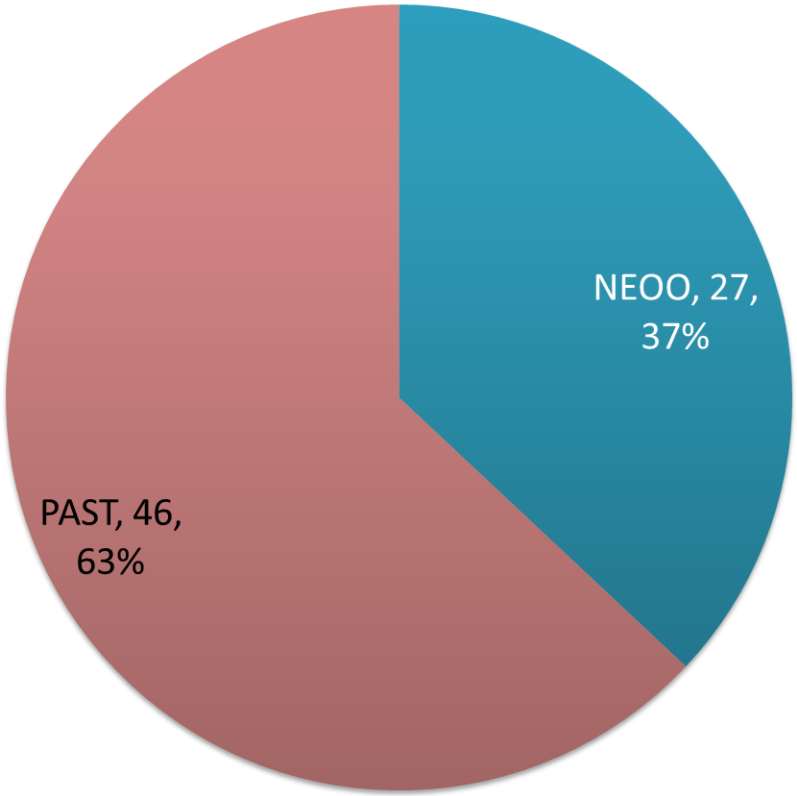


WHAT GOES INTO SOLAR SYSTEM OBSERVATIONS?

Activities (≈Grants)

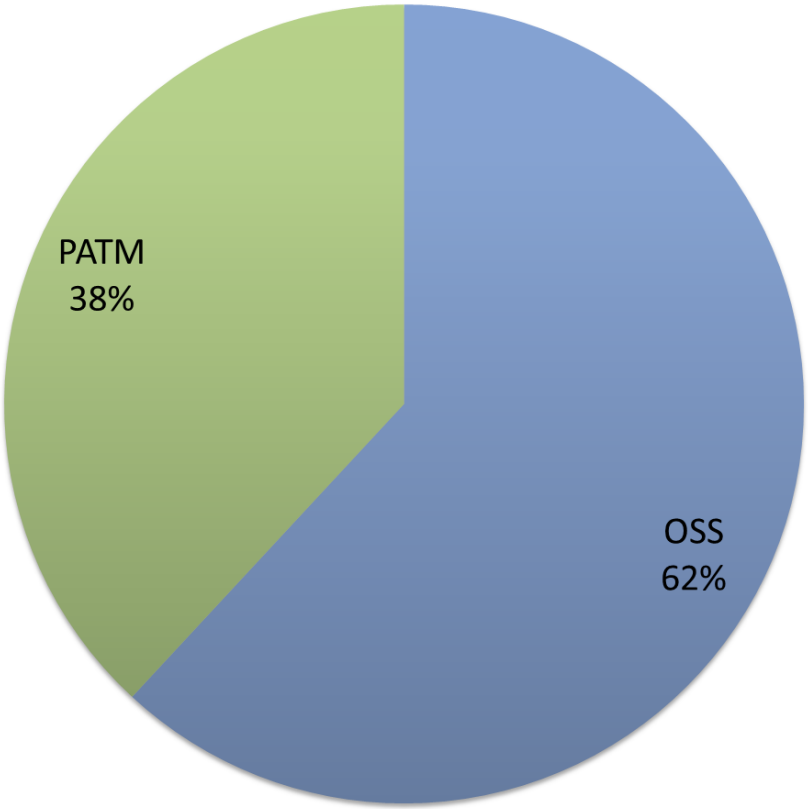


Proposals



WHAT GOES INTO EXOPLANETS?

Activities (≈Grants)



Proposals