

Astrophysics Projects Division



Physics of the Cosmos Program



Cosmic Origins Program

Program Office Technology Management

PhysPAG Briefing AAS Meeting, Austin Texas

Jackie Townsend

PCOS/COR Advanced Concepts and Technology Office Head

January 8, 2012

Technology Management

- **Technology investments selected based on merit-based review processes**
- **Decisions are informed by an ongoing discussion with our community through our Program Analysis Groups (PAGs) and through extensive outreach**
 - The community identifies technology needs by working with the PAG or through individual input using the program web site.
 - The Program Technology Management Board (TMB) prioritizes these needs each summer based on a published set of criteria that includes assessments of urgency, relevance to defined missions and science objectives, and the broader programmatic context
 - These priorities are published each year in the Program Annual Technology Report, along with the status of technologies that were funded the previous year
 - The program references these priorities and this report over the following year as the calls for technology proposals are drafted and selections are made
- **This process improves the transparency and relevance of technology investments, provides the community a voice in the process, ensures open competition for funding, and leverages the technology investments of external organizations by defining a need and a customer**

Technology Management Board

- **Responsibilities**
 - Reviews and prioritizes Program’s technology needs
 - Provides input to Program technology development activities and planning
 - Reviews recommendations for technology development selections
 - Reviews and vets technology development plans and achievement milestones
- **PCOS TMB:**
 - Thai Pham (Chair, ACTO Chief Technologist)
 - Mansoor Ahmed, Tom Griffin (PCOS Program Management)
 - Ann Hornschemeier (PCOS Chief Scientist)
 - Jackie Townsend (PCOS/COR ACTO Head)
 - Allan Cohen (PCOS/COR Systems Engineering Lead)
 - Jaya Bajpayee (PCOS Program Executive)
 - Rita Sambruna (PCOS Program Scientist)
 - Wilt Sanders, Richard Griffiths (Program Scientists)

Technology Cycle

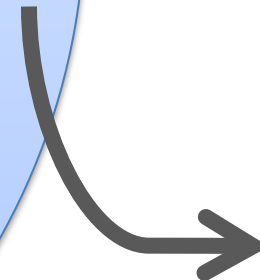
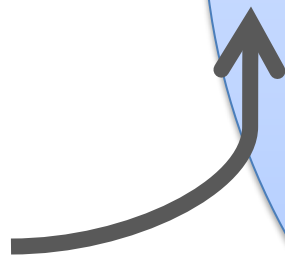


PAG

Science Needs

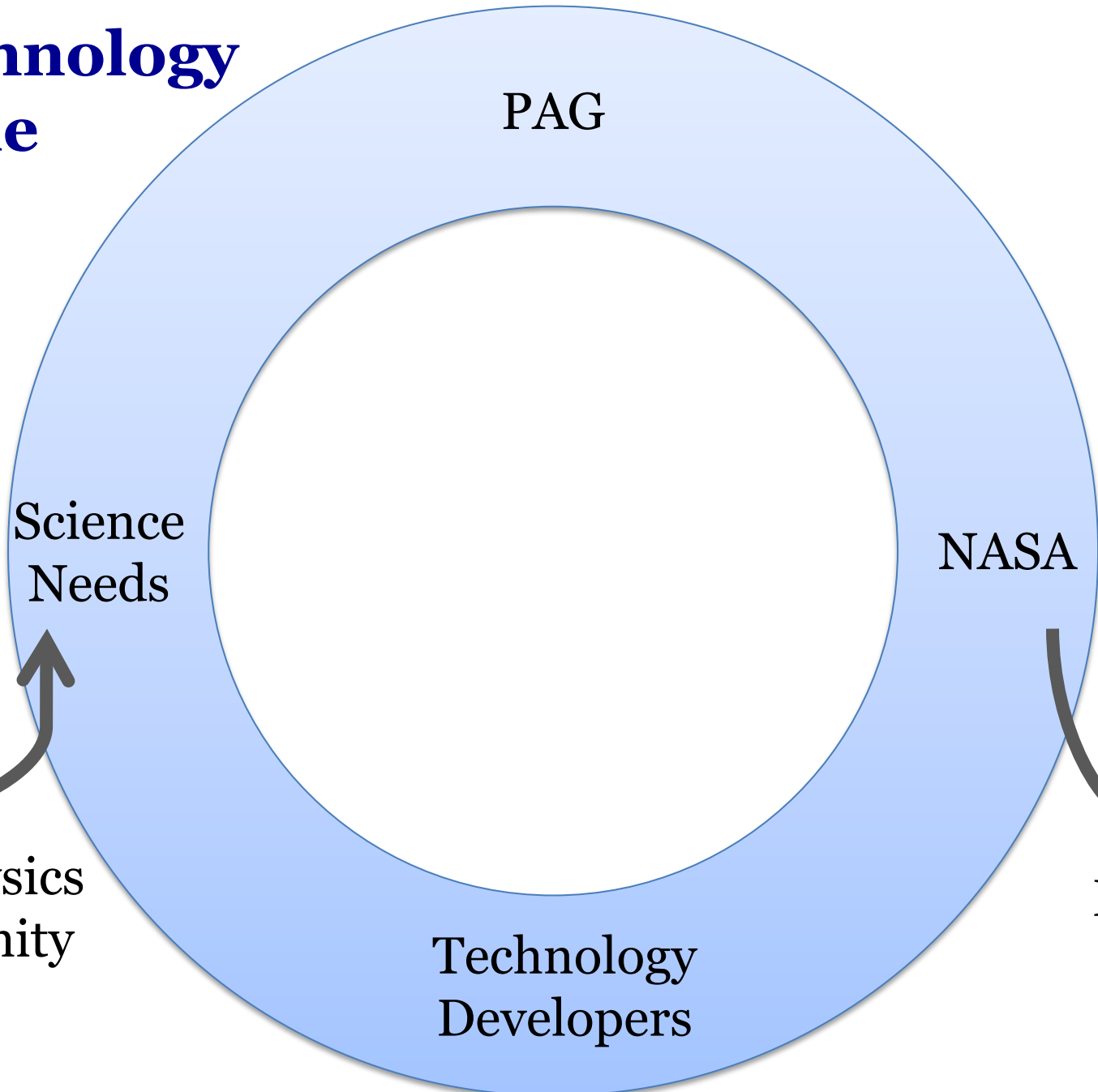
NASA

Technology Developers



Astrophysics Community

Missions



Technology Cycle

PAG

Community Meetings

FACA

Science Needs

NASA

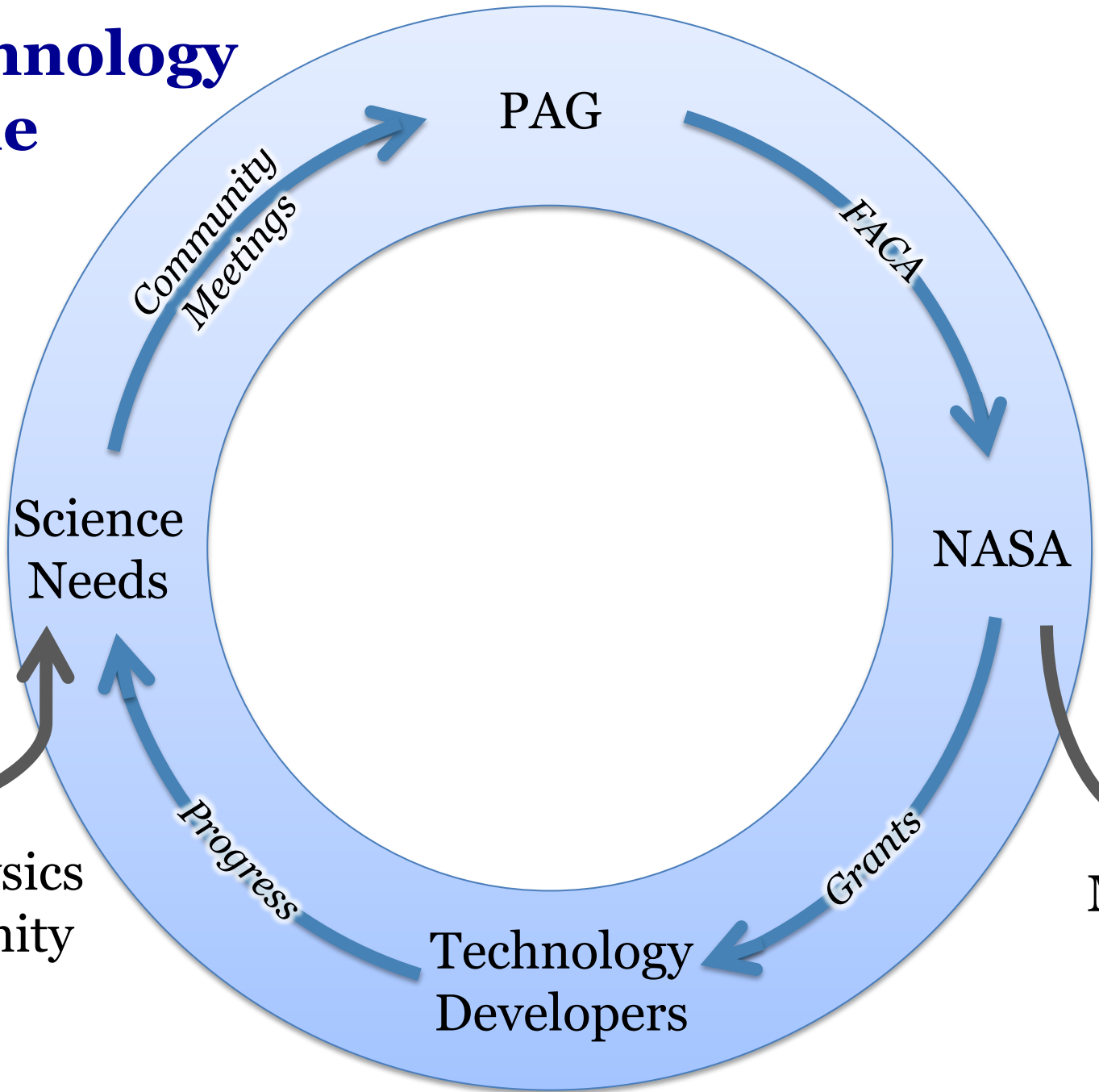
Progress

Grants

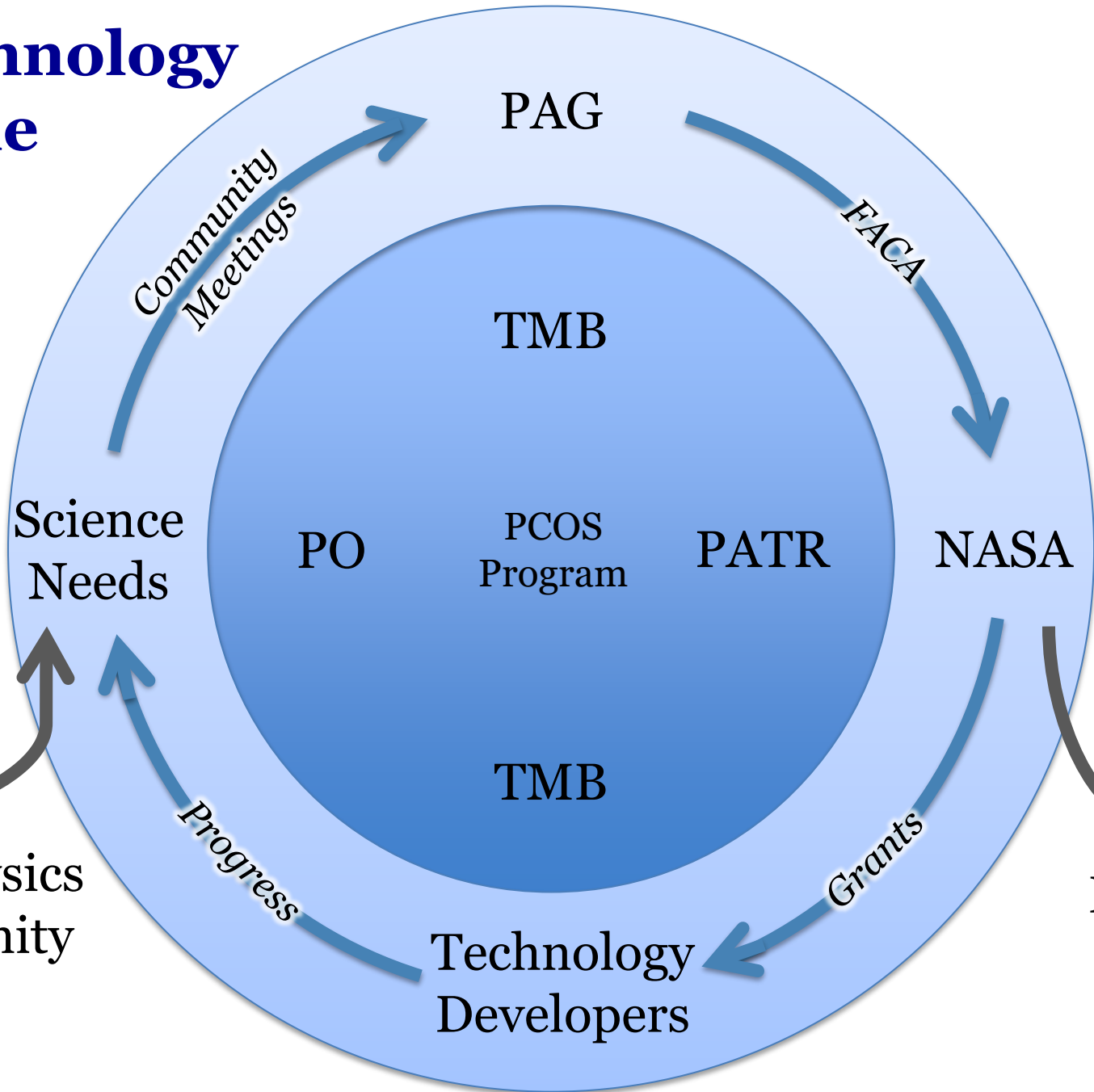
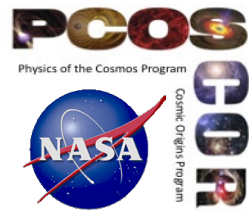
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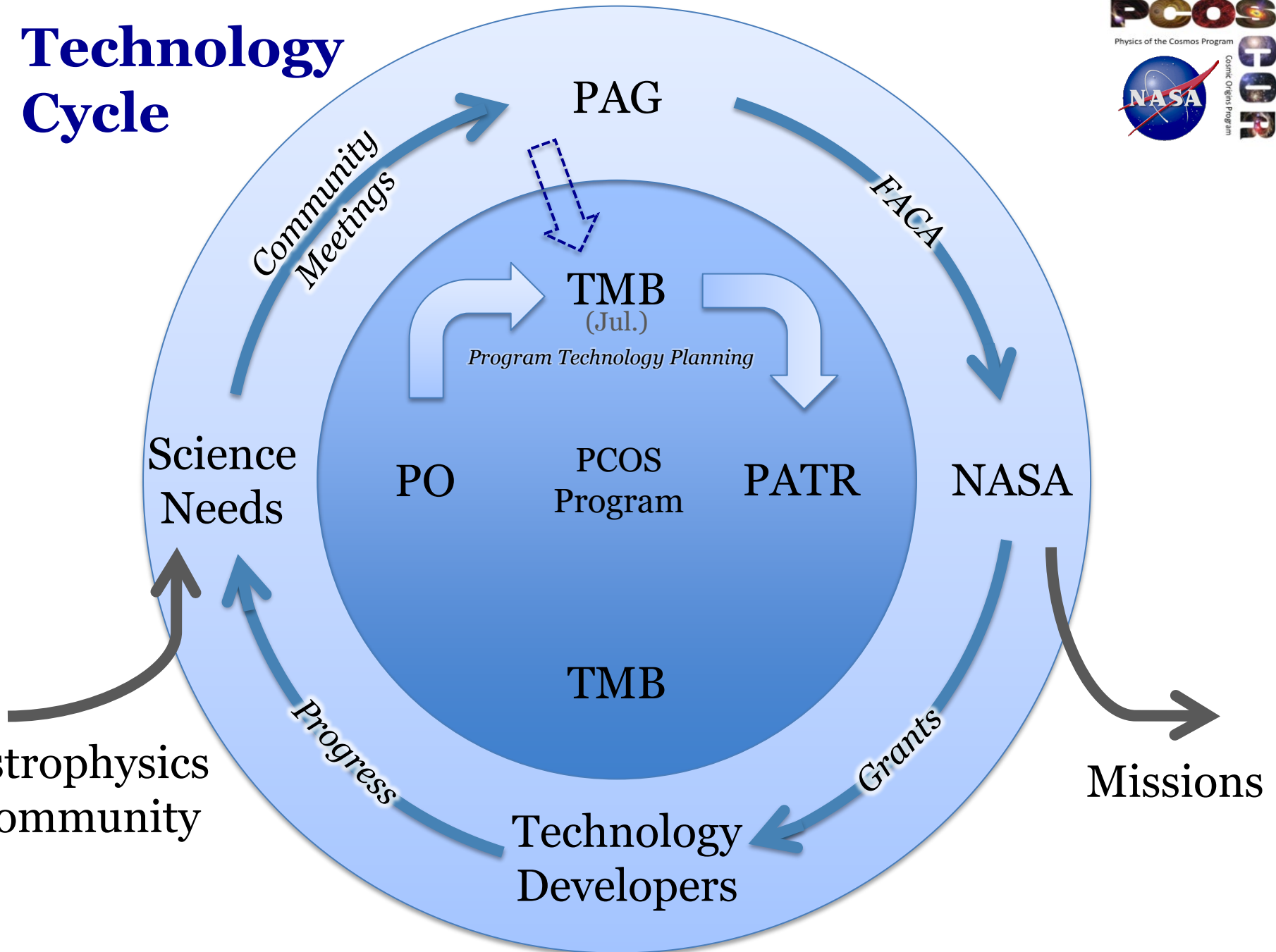
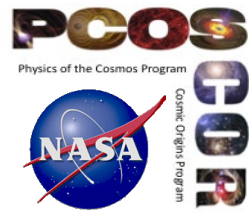
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Technology Developers

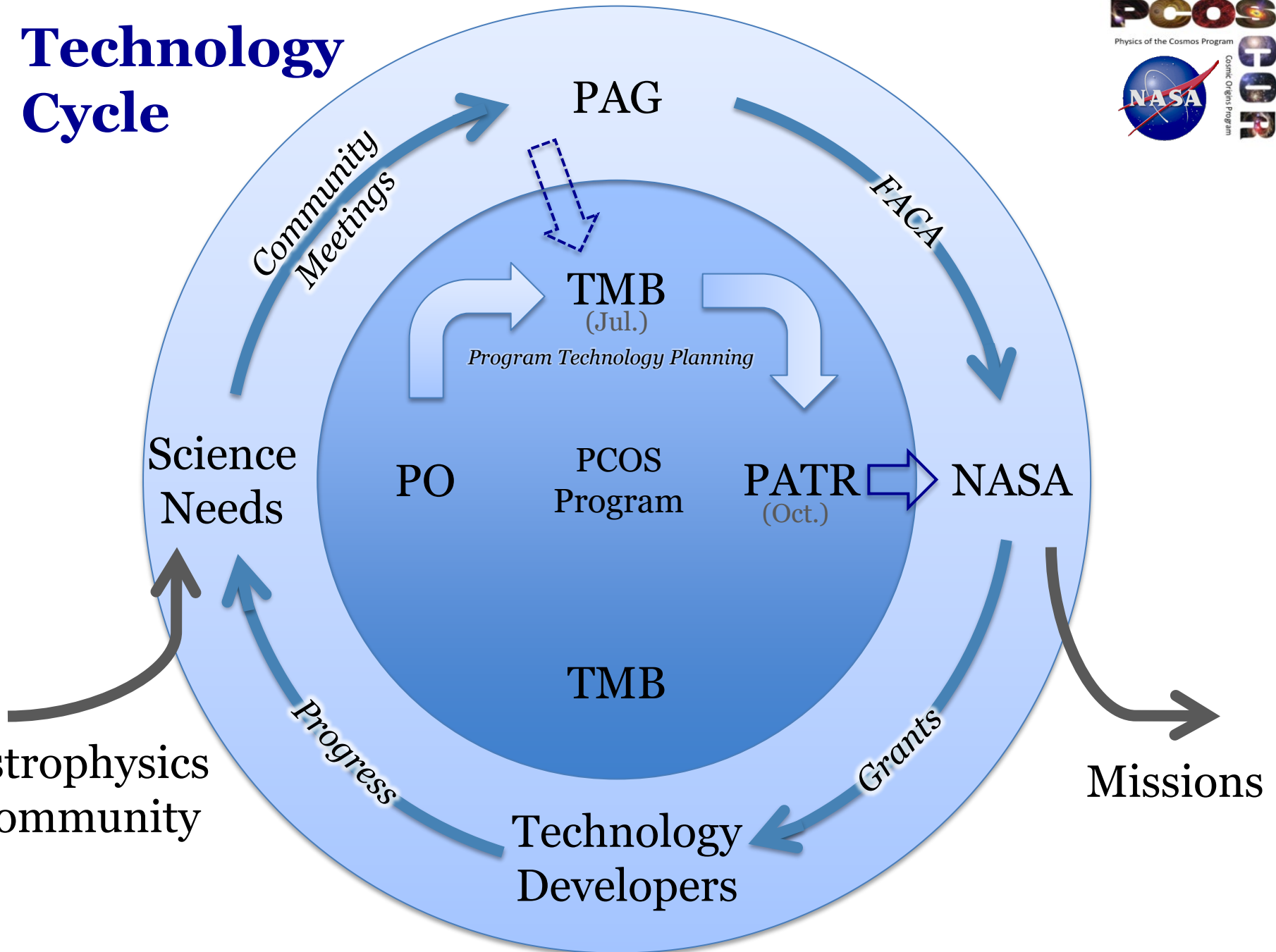
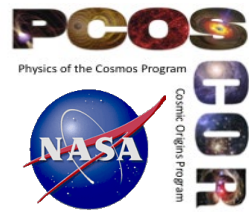
Missions

Astrophysics Community

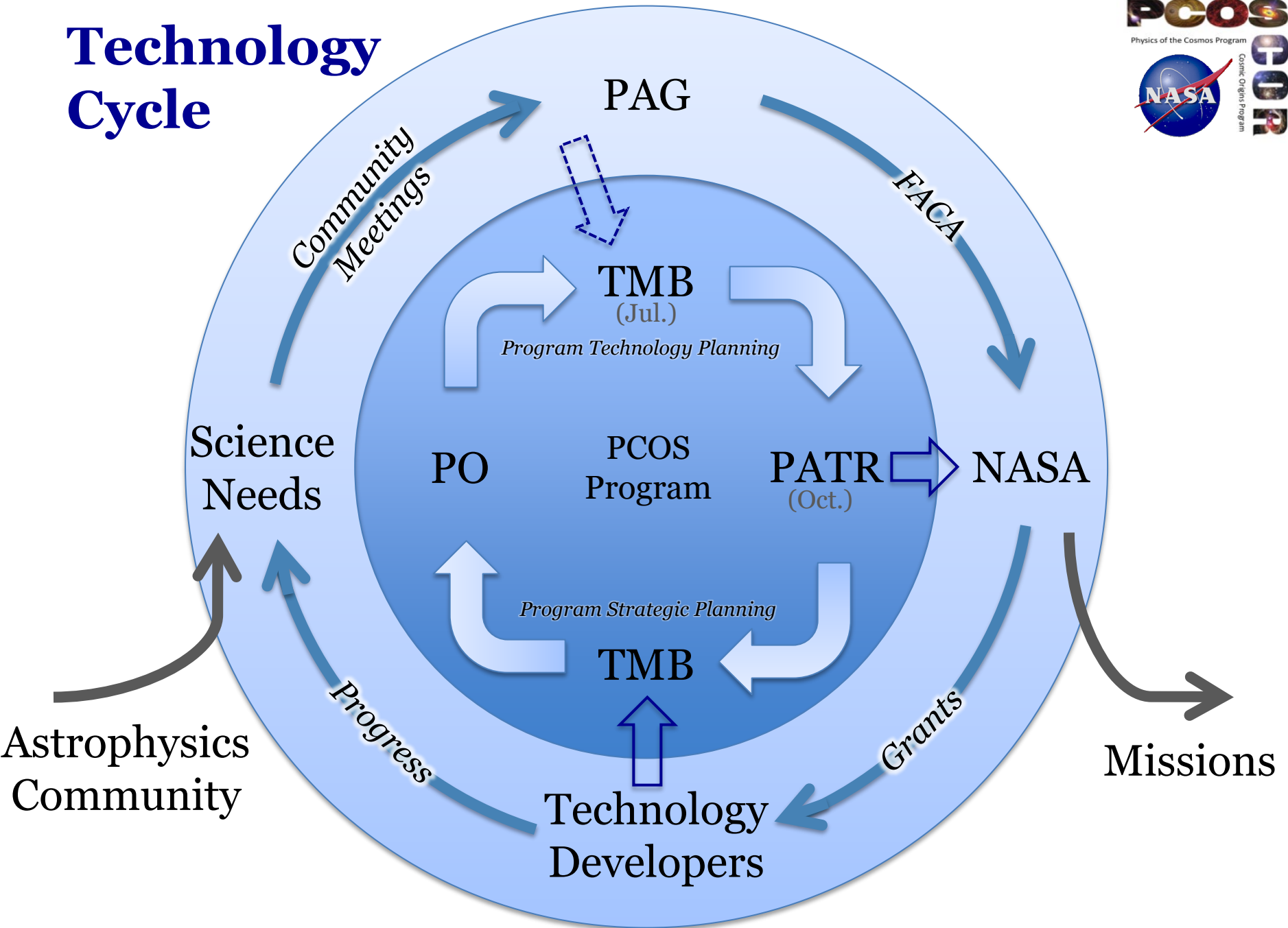
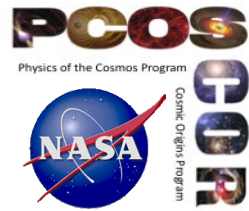
Technology Cycle



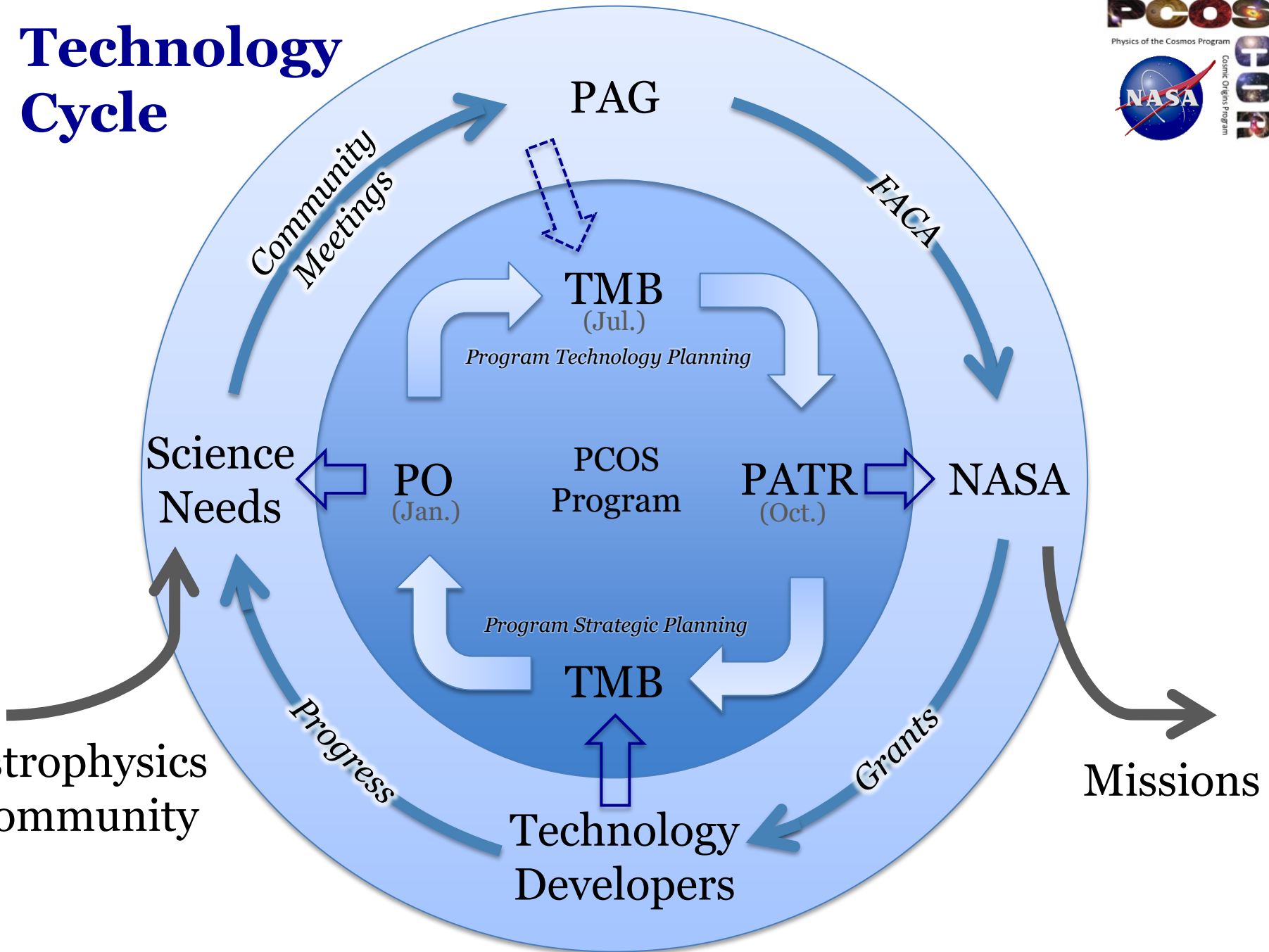
Technology Cycle



Technology Cycle



Technology Cycle



Summary

- **A merit-based, transparent process has been established for technology development that will ensure alignment with program goals**
 - Community input and PhysPAG participation is essential
- **As mission concepts mature, directed funding may be available to fund vetted Technology Development Plans. Until a vetted TDP is in place, all technology funding is allocated through open competition (e.g., APRA, SAT)**
- **FY13 SAT Call has been released**
 - <http://nspires.nasaprs.com/>
 - select "Solicitations" then "Open Solicitations" then "NNH11ZDA001N". Appendix D.8 is for the SAT
- **Key Dates**
 - SAT: NOI due 1/27/12; Proposals due 3/23/12
 - Technology needs due to Program by June 30