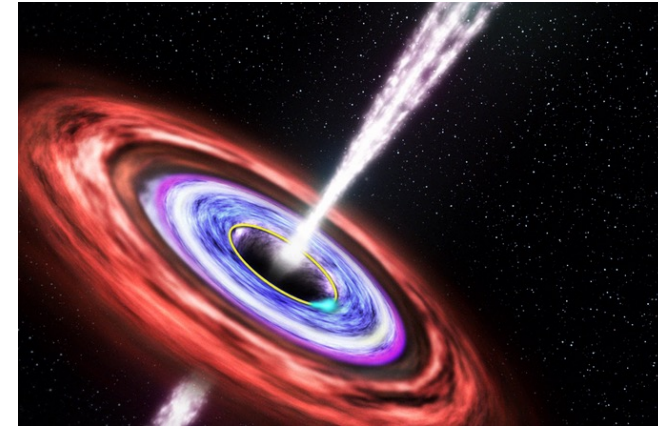
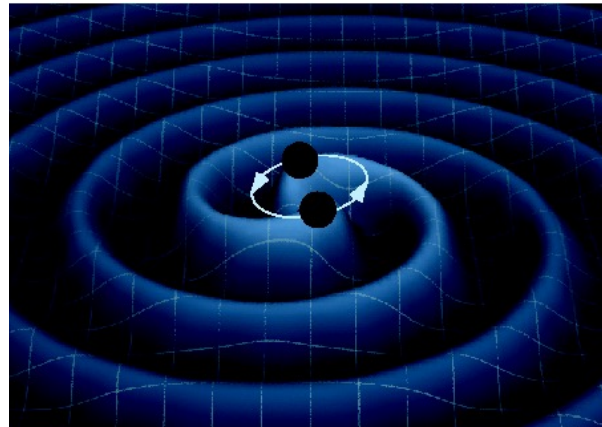
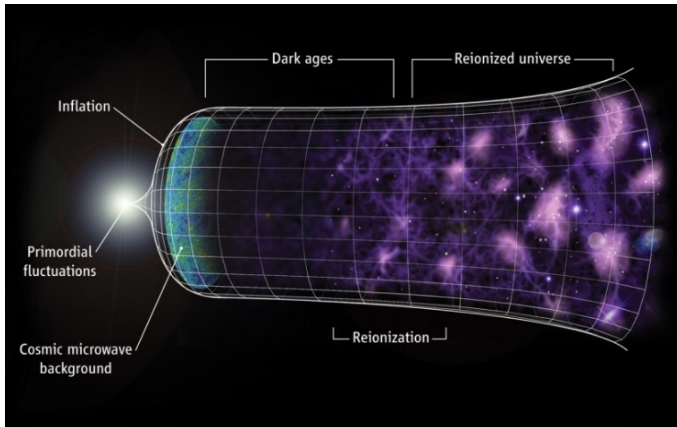


Physics of the Cosmos Program Analysis Group



Justin Finke

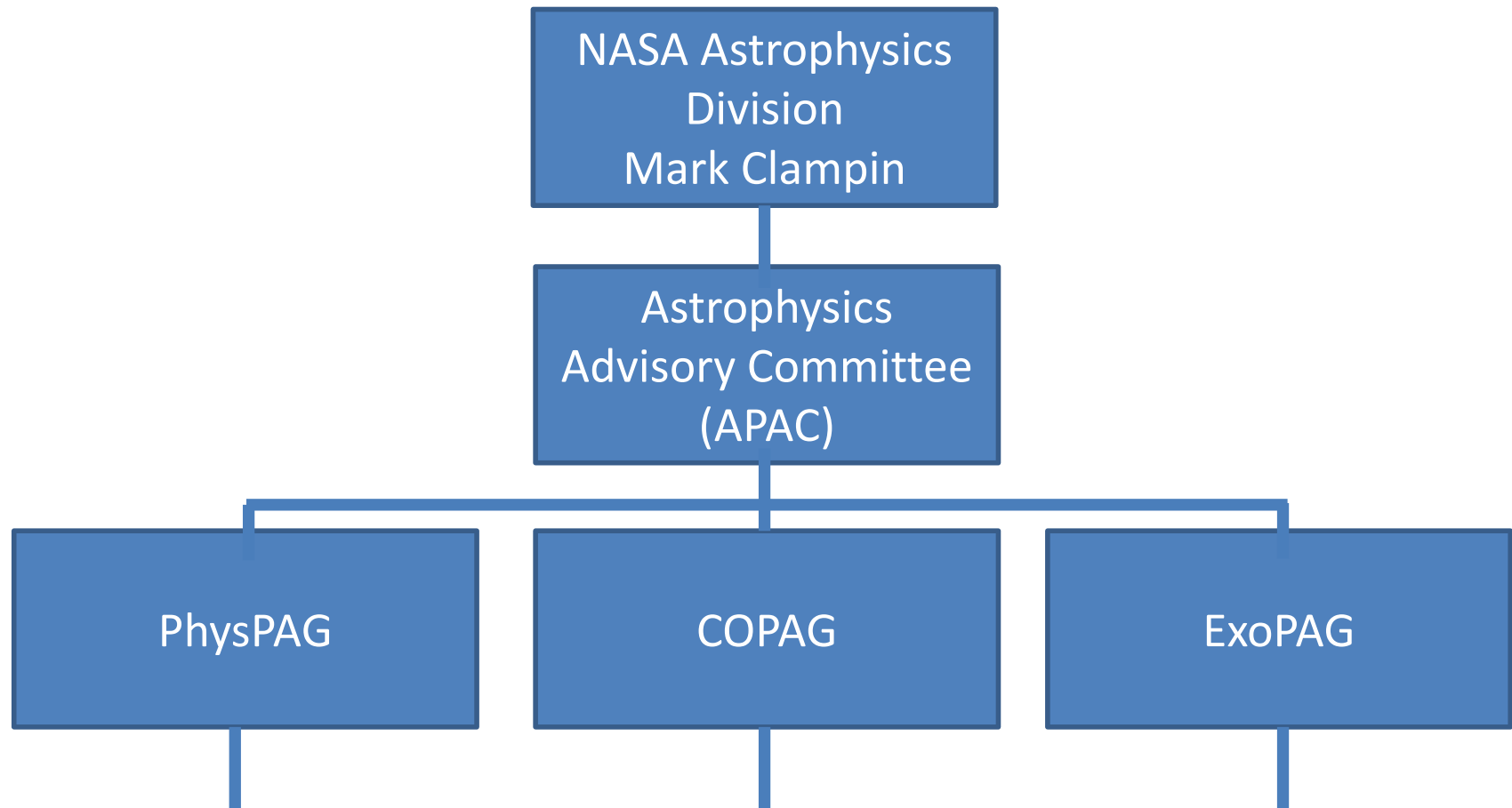
Naval Research Laboratory

*Chair Emeritus, Physics of the Cosmos Program Analysis Group,
PhysPAG*

justin.finke@nrl.navy.mil

AAS Meeting, 7 January 2024

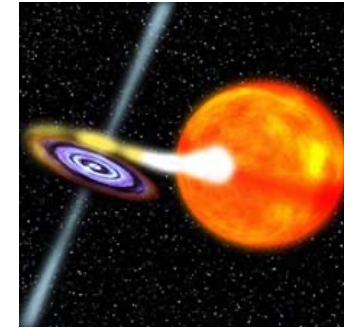
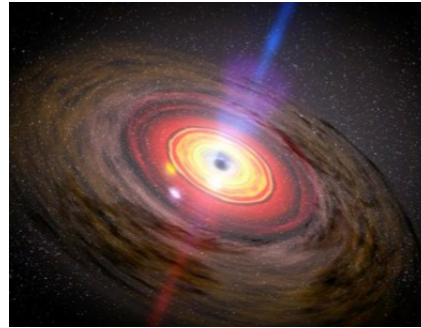
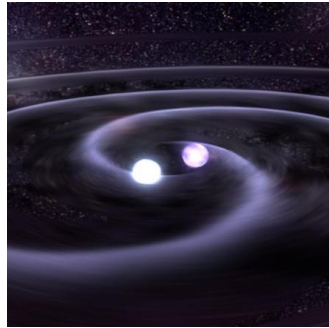
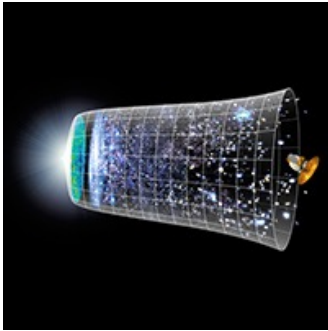
PhysPAG



Science Interest Groups (SIGs) – permanent discipline-specific groups

Science Analysis Groups (SAGs) – created to analyze specific question. Last short amount of time and deliver a report.

Physics of the Cosmos Science Objectives



- **Dark Energy**
- **Big Bang and the Evolution of the Universe**
- **Dark Matter and Cosmic Structure**
- **General Relativity and the Nature of Spacetime**
- **Massive Black Holes and the Evolution of Galaxies**
- **Matter and Energy in the Most Extreme Environments**

PhysPAG Executive Committee



Name	Institution	Expertise	Term
Justin Finke (Chair Emeritus)	Naval Research Laboratory	GR SIG	Dec 2020 – Dec 2024
Athina Meli (Chair)	North Carolina A&T	CR SIG	Dec 2021 – Dec 2024
David Pooley (Vice Chair)	Trinity University	XR SIG	Dec 2021 – Dec 2024
Eric Burns	Louisiana State University	TDAMM SIG	Dec 2021 – Dec 2024
Kristin Madsen	NASA / GSFC	XR SIG	Dec 2021 – Dec 2024
Chiara Mingarelli	U Connecticut	GW SIG	Feb 2023 – Dec 2025
Alessandra Corsi	Texas Tech	GW SIG	Feb 2023 – Dec 2025
Chien-Ting Chen	USRA / MSFC	XR SIG	Feb 2023 – Dec 2025
Roger O'Brient	JPL	IP SIG	Feb 2023 – Dec 2025
Rebekah Hounsell	UMBC / GSFC	CoS SIG / TDAMM	Feb 2023 – Dec 2025
Manel Errando	Washington U. St. Louis	GR SIG	Feb 2023 – Dec 2025
Brian Grefenstette	Caltech	XR SIG / HWO	Jan 2024 – Dec 2026
Vivian Miranda	Stony Brook	CoS SIG	Jan 2024 – Dec 2026
Jeremy Perkins	NASA / GSFC	GR SIG	Jan 2024 – Dec 2026
Stephanie Wissel	Penn State	CR SIG	Jan 2024 – Dec 2026



Science Interest Groups (SIGs)

- **Inflation Probe Science Interest Group (IP SIG)**
- **Cosmic Structure Science Interest Group (CoS SIG)**
- **Cosmic Ray Science Interest Group (CR SIG)**
- **Gamma-ray Science Interest Group (GR SIG)**
- **Gravitational Wave Science Interest Group (GW SIG)**
- **X-ray Science Interest Group (XR SIG)**
- **Time domain and Multi-Messenger Science Interest Group (TDAMM SIG)**



Science Analysis Groups (SAGs)

- **Gamma-ray Transient Network (GTN) SAG**
- **New Great Observatories (NGO) SAG (cross-PAG)**
- **Astrophysics with Equity, Surmounting Obstacles to Membership: AWESOM SAG (cross-PAG)**
- **Time-domain and Multi-Messenger Communications (TDAMMCOM) SAG**
- **Future Innovations in Gamma-ray Science (FIGS) SAG**



PhysPAG at AAS

Sunday, 7 January 2024

▼ Schedule

Meeting	Time	Location
PhysCOS & PhysPAG Session [Agenda]	9:00am – 1:00pm CT	Room: 243
TDAMM SIG Session [Agenda]	2:00pm – 3:00pm CT	Room: 244 / 245
NASA Joint Program Analysis Group (Joint PAG) [Agenda]	3:00pm – 5:00 pm CT	Room: 244 / 245

Tuesday, 9 January 2024

▼ Schedule

Meeting	Time	Location
Gamma Ray Science Interest Group (GR SIG) [Agenda]	10:00am – 11:30am CT	Room: 219
Gravitational Wave Science Interest Group (GW SIG) [Agenda]	2:00pm – 3:30pm CT	Room: 219

PhysCOS booth, exhibit hall!

GR SIG / FIG SAG



FIG SAG: “[I]dentify science drivers, necessary capabilities, and priorities for the future of gamma-ray astronomy”.

<https://pcos.gsfc.nasa.gov/sags/figsag.php>

Gamma Ray Science Interest Group (GR SIG)

Tuesday, 9 January 2024

Ernest N. Morial Convention Center, Room: 219

10:00am – 11:30am CT

▼ Agenda

Time	Topic	Speakers
10:00am – 10:05am	GR SIG intro to FIG SAG – Broad overview of PhysCOS: Structure & Purpose	Manel Errando
10:05am – 10:20am	FIG SAG Overview	Michelle
10:20am – 10:35am	Longer Historical Context of Gamma-ray Reports	Regina Caputo
10:35am – 10:50am	International Context	Enrico Bozzo (virtual)
10:50am – 11:05am	Recent Discussions in Gamma-ray Planning	Tiffany Lewis
11:05am – 11:30am	Community Discussion on Report	Chris Fryer

Summary



- **Get involved!**

- PhysPAG EC members want to hear your input!
- Sign up for mailing list! <https://pcos.gsfc.nasa.gov/phycos-news-email-list.php>
- Join a SAG (AWESOM, GTN SAG, NGO SAG, TCOM SAG, FIG SAG) or suggest a new one!
- Consider joining the Executive Committee!

Bonus slides

