Cosmic Origins Program Analysis Group (COPAG) Report to Astrophysics Advisory Committee (APAC) June 23 & 24, 2020

Margaret Meixner

(COPAG Executive Committee Chair)

# **COPAG EC Membership**

Margaret Meixner (Chair)	2021	SOFIA Science Mission Operations/USRA
Misty Bentz	2020	Georgia State University
Steve Finkelstein	2021	University of Texas
Alina Kiessling	2023	Jet Propulsion Laboratory, Caltech
Janice Lee	2020	Caltech/IPAC
Stephan McCandliss	2021	Johns Hopkins University
Tom Megeath	2020	University of Toledo
Alexandra Pope	2021	University of Massachussetts
Claudia Scarlata	2020	University of Minnesota
Jason Tumlinson	2020	STScI
Sarah Tuttle	2020	University of Washington
One additional		TBD

Kartik Sheth (Executive Secretary, Ex-Officio)	NASA HQ
Eric Tollestrup (Ex-Officio)	NASA HQ
Thanks you! Susan Neff (COR Program Office Chief Sci	entist) NASA/GSFC,
Coming soon: Peter Kurczynski (COR Program Office,	Chief Scientist Ex-Officio) NASA/GSFC
Erin Smith (COR Program Office, Ex-Officio)	NASA/GSFC

# Peter Kurczynski

-New COR Chief Scientist coming to NASA/GSFC

-Program Director in NSF Astronomical Sciences Division

-Advanced Technologies and Instrumentation program

-Event Horizon Telescope

-Faculty at Rutgers University

-Research interests in galaxy evolution, member of Candels, CEERS, UVUDF

# Welcome Peter!



# **COPAG Activities Since March**

- One multi-PAG survey about COVID-19 impact and ADAP cadence led by Janice Lee
- One science analysis groups (SAGs)
  - SAG11 Cosmic Dawn starting– Claudia Scarlata & Steven Finkelstein delayed start
- COPAG EC started discussions on how COPAG EC operates and how it can do better in the future especially in the post-Decadal era: Alina Kiessling (lead), Misty Bentz, Sarah Tuttle
- Two science interest groups (SIGs)
  - UVSIG Jason Tumlinson
  - IRSIG Meredith MacGregor & Nichael Zemcov
- One technology interest group (TIG) Sarah Tuttle, recruiting members

# Cosmic Dawn Science Analysis Group #11

- Reionization and galaxy evolution in the very early universe
- What questions will remain after the JWST mission
- Assess the potential for future NASA large missions or proposed probeclass missions to answer these questions
- Explore what investigations can be done with current telescopes and archives
- Identify the need for coordinated multi-observatory programs and/or simulation efforts towards these goals.
- Joint with PhysPAG
- Start delayed by COVID-19 impact University professors slammed with online teaching and life working from home

Survey Description:

- survey to solicit "input on the impacts of COVID-19 on NASA astrophysics research, with special focus on the preparation and submission of proposals for the Astrophysics Data Analysis Program (ADAP)."
- 6 questions on impacts of ADAP change in deadline and funding cadence ; 10 questions on demographics; 5-10 min to complete
- Feedback provided by ExoPAG and PhysPAG EC's
- Survey distributed May 15 to Exo, Phys, and COPAG lists and open until June 5
- Total of 195 responses
- Copy of survey available at: <u>https://drive.google.com/file/d/1aOXCKRihW4G9cot91gs\_zYFSnEeOBwz2/view?usp</u> <u>=sharing</u>

Main Results:

"Overall, on a scale from 1 to 5, how do you think the change in ADAP solicitation cadence impact your research. (1=negative impact; 3=no impact; 5=positive impact)."

Demographic	Ν	Net Negative	Net Positive	Neutral
All	169	59%	11%	30%
Male	68%	53%	11%	36%
Female	32%	76%	9%	15%
Early career/ non-tenured	27% (44% female)	64%	11%	25%

Majority response is that change in solicitation cadence will negatively affect research, **but women, early-career researchers, and those without job security expect to be even more negatively impacted** than the general population of ADAP proposers.

#### Main Results:

Describe why the change in ADAP solicitation cadence, combined with preservation of total funding available from ROSES20 and ROSES21, results in a net positive or negative gain for your research.
net positive: less time on ADAP proposal preparation, with preservaton of total funding
net negative: fewer opportunities to apply for funding has negative impacts, even with preservation of total
Other

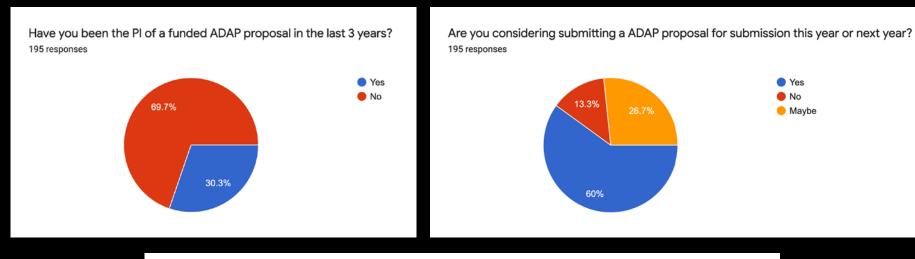
#### Main Results:

Describe why the change in ADAP solicitation cadence, combined with preservation of total funding available from ROSES20 and ROSES21, results in a net positive or negative gain for your research.				
net positive: I	18%	DAP proposal preparation, with preservaton of total funding		
net negative:	70%	unities to apply for funding has negative impacts, even with preservation of total		
Other		]		

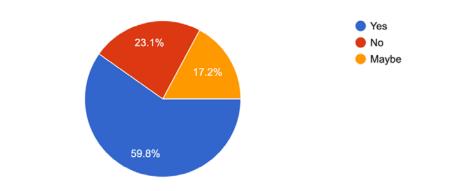
"If you would like to provide additional input about the impacts of COVID on your NASA supported astrophysics research that could be helpful for informing policy, please provide them here. Input beyond ADAP is welcome here." (N=49)

- Worried about ability to fund students, postdocs, soft money researchers: 14/49 = 29%
- Extra caregiving duties causing decreased productivity: 12/49 = 24%
- Furloughs and/or increased teaching duties causing decreased productivity: 5/49 = 10%
- Costed extensions, grant amendments, or small emergency grants needed: 9/49 = 18%

#### Supplementary Data



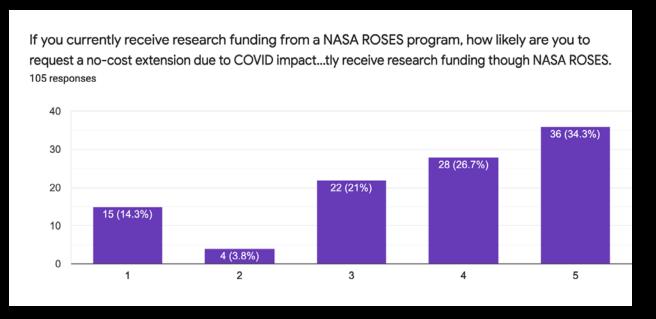
Have your plans for ADAP proposal submission changed due to NASA's modification of deadline and funding cadence? 169 responses



### Supplementary Data

How have your ADAP proposal plans changed? (Check all that apply.) $^{\star}$					
I might now submit a proposal because the deadline has been extended. <b>39%</b>					
I might now submit a proposal because there will be no opportunity in FY21.					
I might submit more than one proposal. 27%		%			
Other					

#### Supplementary Data



#### Comments from COPAG

Feedback on failed proposals more readily implemented on a 1 year cadence to improve subsequent proposals and increase chances of success; especially important for early career researchers, and those seeking tenure and career advancement.

More opportunities with half success rate preferable to fewer opportunities at higher success rate

# **Summary Information**

- COVID-19 Survey results
- SAG11 on Cosmic Dawn will form and start its work this summer

# **COPAG** Future Activities

- Bi-weekly EC telecons will continue
- COPAG EC improving how it operates
- Cosmic Dawn Study Analysis Group will form its group soon.
- TIG is building its group
- IRSIG continues meetings
- Exploring new SAGs to address specific analysis of science and tech gaps