

If you can, please help support our community in Pasadena/Altadena

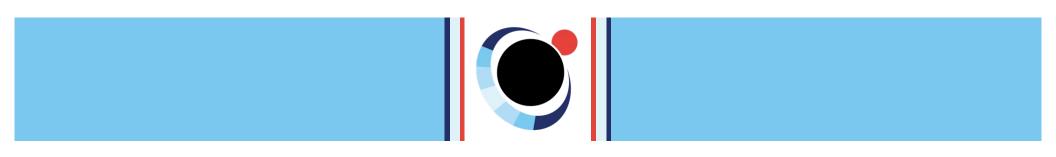




Advancing the Roman Coronagraph Instrument to Flight: Project Status and Coronagraph Community Participation

Program Activities

AAS 245 Winter 2025 Tuesday Jan. 14, 10am-12pm





What is the CPP?

- Established by 2022 NASA ROSES Nancy Grace Roman Space Telescope Research and Support Participation Opportunities program element
 - Solicited proposals aimed at supporting the progress of and exploiting the scientific and technical data from Roman
 - CPP category limited to sole-PI/small-group proposals with intent to form a single, cohesive CPP Team composed of:

- International partners
- Representatives from Coronagraph science and engineering teams
- Members of Science Support Center (SSC)

CY22	CY23	CY24	CY25	CY26	CY27	CY28	CY29	
Phase C			Phase D	Launch 🔺	Phase E			
Mission Final Design and Fabrication; Payload Assembly			Mission Ass'y, Integrat	ion & Test Cor	. Mission Operations			
Wide Field Science Period of Performance (large proposals) Wide Field Science Period (regular) WFS Period (anticipated cycle 2)								
Proposal Project Infrastructure Teams Perio			d of Performance			PIT Possibl	e Extension 🗲	
Coronagraph Community Participation Program Period of Performance Coronagraph CPP Possible Extension (s)								
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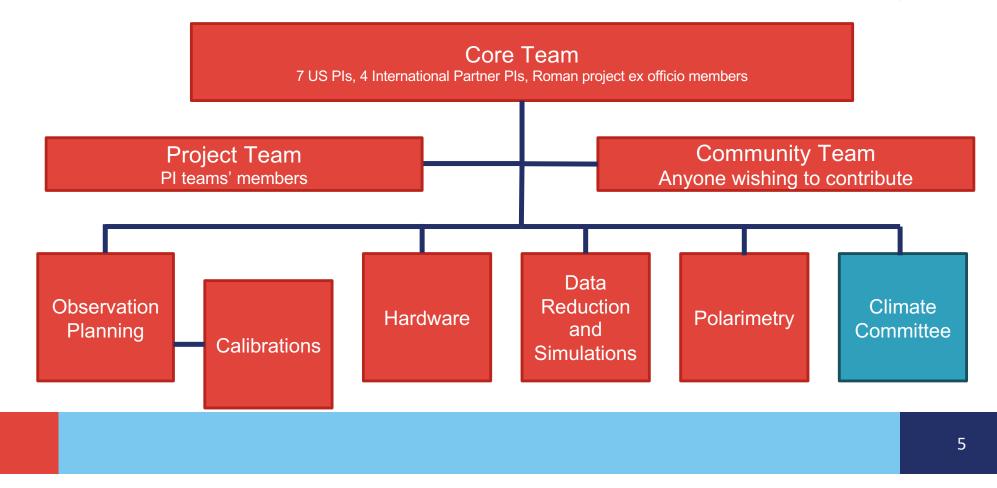


# What are the CPP's top Priorities?

- To make the Roman Coronagraph Instrument as productive as possible
- Near-term high-priority tasks:
  - Development of coronagraph instrument data reduction pipeline (DRP)
  - Development of target and reference star database
  - Vetting programs for reference stars
  - Finalization of instrument calibrations
  - Development of observation scheduling tools
  - Simulating everything
- Next: Preparing for beyond-requirements observations



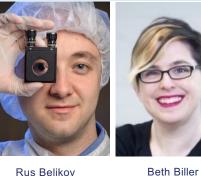
### **CPP** Organization



#### Who's leading the CPP?



Vanessa Bailey, JPL CPP Chair Roman Coronagraph Instrument Technologist



Rus Belikov Ames



ESA

U. Arizona

Alexandra Greenbaum Caltech/IPAC SSC



MPIA

Oliver Krause



Bertrand Mennesson JPL Roman Deputy **Project Scientist** 



Max Millar-Blanchaer

UCSB

DRP & Sims WG co-lead

Naoshi Murakami JAXA



Laurent Pueyo STScl



Jason Rhodes JPL Roman Project Scientist



Dmitry Savransky, Cornell Inaugural CPP co-chair



Arthur Vigan

**CNES** 

Jason Wang Northwestern DRP & Sims WG co-lead



U. Arizona

Obs WG lead

Neil Zimmerman, GSFC Roman Project Coronagraph Scientist

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### Who's Actually Doing the Work?

Ramva Anche (UArizona) Ewan Douglas (UArizona) Jessica Gersh-Range (Princeton) Satoshi Itoh (Nagoya Univ.) Bruce Macintosh (UC Observatories) Jun Nishikawa (NAOJ) Frans Snik (Leiden University) Takahiro Sumi (Osaka Univ.) Taichi Uyama (Cal State U. Northridge) Michele Woodland (GSFC) Hibiki Yama (Osaka Univ.) Hanying Zhou (JPL) Oscar Carrion-Gonzalez (LESIA) John Debes (STScI) David Doelman (SRON) Markus Feldt (MPIA) Hajime Kawahara (ISAS/JAXA) John Livingston (ABC/NAOJ) Axel Potier (Bern) Matthias Samland (MPIA) Aoi Takahashi (ABC/NAOJ) Pierre Baudoz (LESIA) N. Jeremy Kasdin (Princeton) Jürgen Schreiber (MPIA) Lisa Altinier (LAM) Eduardo Bendek (JPL)

Ellis Bogat (UMarvland) Robert De Rosa (ESO (Chile)) Motohide Tamura (UTokyo/ABC) Jorge Llop Sayson (JPL) Tsutsumi Nagai (Osaka Univ.) Masataka Aizawa (Riken) Yui Kawashima (ISAS/JAXA) Kenta Yoneta (NAOJ) Benjamin Charnay (LESIA) Malachi Noel (Northwestern) Justin Hom (UArizona) Samantha Hasler (MIT) Patrick Lowrance (IPAC) Lee Armus (IPAC) Zhexing Li (UCR) Stephen Kane (UCR) Toru Yamada (ISAS, JAXA) Masayuki Kuzuhara (NINS Astrobiology Center) Emmanuel Joliet (Caltech / IPAC) Eric Mamajek (JPL) Susan Redmond (Caltech / JPL) Nick Schragal (University of Arizona) Alexis Lau (LAM) Leonid Pogorelyuk (RPI) Toshiyuki Mizuki (ABC/NAOJ) Marah Brinjikji (ASU)

Sarah Blunt (Northwestern) Elodie Choquet (LAM) Julien Girard (STScI) Sergi Hildebrant Rafels (JPL) John Krist (JPL) Sarah Moran (UArizona) Karl Stapelfeldt (JPL) Marie Ygouf (JPL) Robert Zellem (JPL) Mark Marley (UArizona) Remi Soummer (STScI) Tyler Groff (GSFC) Bijan Nemati (Tellus1) Cynthia Wong (JPL) Kevin Ludwick (U. Alabama-Huntsville) Tim Koch (JPL) Jennifer Sobeck (IPAC) James Ingalls (IPAC) Amanda Chavez (Northwestern) Zarah Brown (UArizona) Gaël Chauvin (OCA) Dan Sirbu (Ames) Wolfgang Brandner (MPIA) Shota Miyazaki (ISAS/JAXA) Emiel Por (STScI) Johan Mazoyer (LESIA)

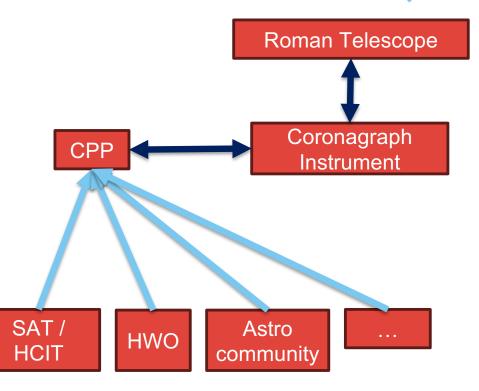
### CPP is the conduit for community input



Planed efforts to solicit input:

#### - Early 2025:

- Coronagraph Primer and Community Interest Survey
- < 15min time commitment</p>
- high-level ranking of priorities
- Very brief ideas for tests or targets
- Mid 2025: CPP issues call for whitepapers to flesh out specific concepts
  - once supporting tools are available



## Agenda



10:00	Opening Remarks	Max Millar-Blanchaer
10:10	Instrument Performance and Status WG	Dmitry Savransky
10:25	DRP & Simulations WG	Max Millar-Blanchaer
10:45	Observation Planning WG	Schuyler Wolff
11:00	Reference Star Vetting	Justin Hom (Remote)
11:15	Hardware Working Group	Dan Sirbu
11:25	Community Survey	Schuyler Wolff
11:35	ROSES Call	Dominic Benford
11:45	Open Discussion	