

Welcome!

Help Guide LSSTC's Fundraising Efforts

8/13/20, 10:30a PDT

Chair: Jeno Sokoloski

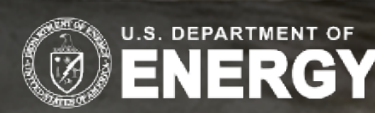
Rubin Observatory

Session Webpage:

<https://project.lsst.org/meetings/rubin2020/agenda/session/help-guide-lsstcs-fundraising-efforts>

Rubin2020_PCW Slack Channel:

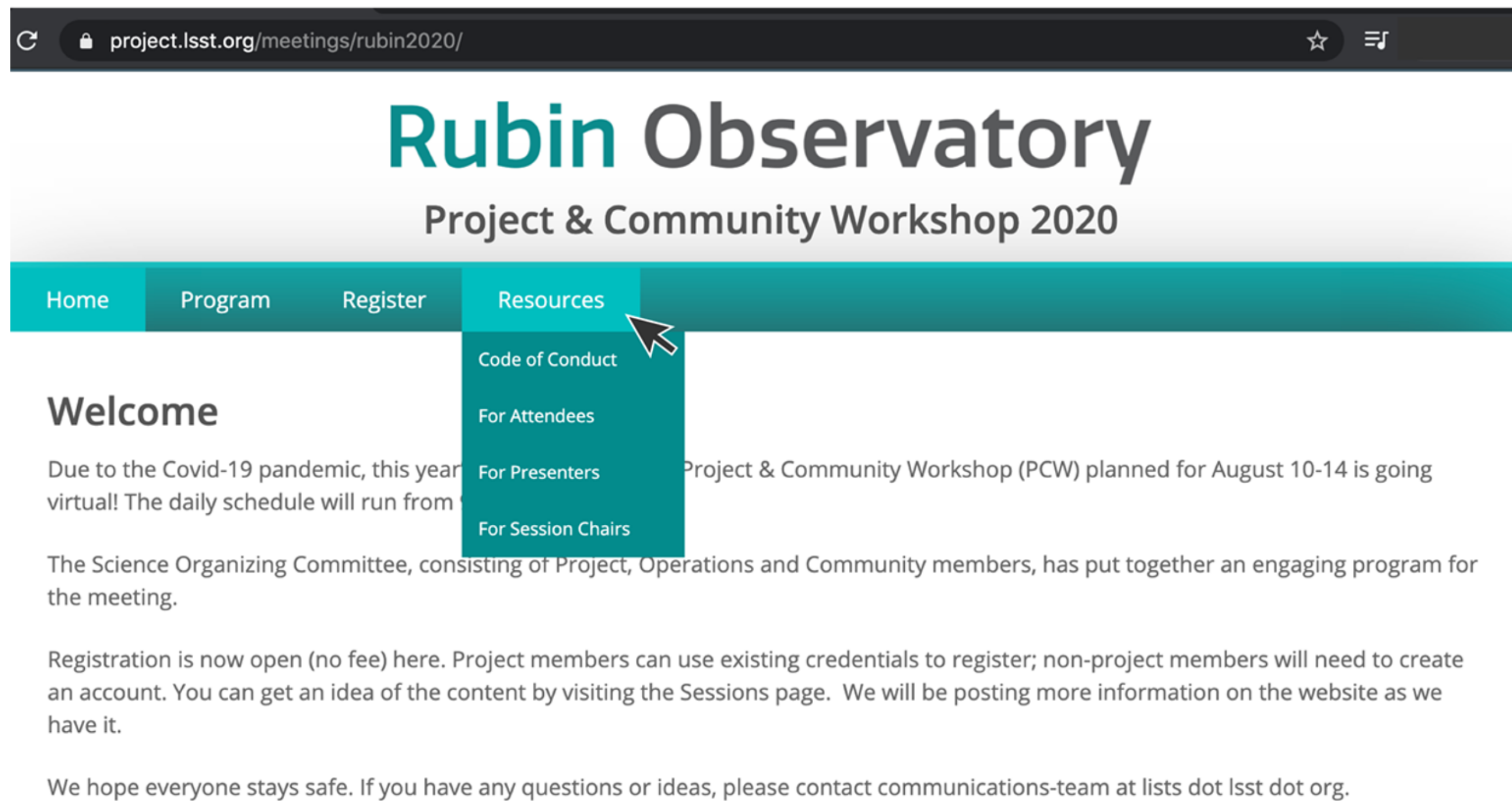
#day4-thu-slot2b-lsstc-fundraising



Friendly Reminders



You agreed to abide by the Code of Conduct at registration - it can be found here on the website



Rubin adheres to the principles of Kindness, Trust, Respect, Diversity and Inclusion in order to provide a learning environment that produces rigor and excellence.



Any discriminatory behavior against colleagues on any basis, such as gender, gender identity, race, ethnic background, national origin, religion, political affiliation, age, marital status, sexual orientation, disabilities or any other reason will not be tolerated.



If I witness any form of bullying, harassment or aggression I will follow the reporting instructions in the Code of Conduct.

Friendly Reminders



**All talks at this workshop
will be recorded.**

If you do not wish to be recorded, you
are welcome to keep your camera off.



**Videos are posted
the next working day.**

Each session will be posted on YouTube
and embedded on the session's page.



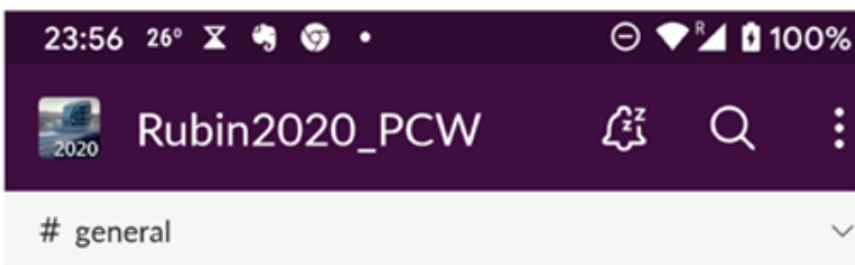
**Give Slack questions
a thumbs-up.**

Questions with more thumbs up
may get priority if time runs short.



Show your appreciation.

Feel free to applaud at any time
but especially at the end - Slack
has a clap emoji.



Welcome!

Slack is a messaging app for groups of people who work
together. You can send updates, share files, and organize
conversations so that everyone is in the loop.

**Ask questions through the Slack
channel or the Zoom chat.**

PT	Monday	Tuesday	Wednesday
08:45		Lightning Stories	Lightning Stories
09:00	Director's open (15)	Plenary 2	Plenary 3
09:15	Plenary 1	Operations QA	Science Collabo
09:30	Construction QA (45)		Report
09:45			
10:00			BREAK (30)
10:15			
10:30	Intro to Rubin: Systems & Jargon	Algorithms Workshop Follow-up	Rubin Research Bytes (contributed flash talks)
10:45			Evaluating Survey Strategies
11:00			
11:15			
11:30			BREAK (30)
11:45			
12:00	Community Support for Science	External Synergies for Rubin	Commis. & Validation
12:15			In-kind proposal workshop
12:30			Community Preparation for Early
12:45			
13:00			

**You can access the presentation
material on the session page.**

LSST CORPORATION

A MEMBER-BASED NON-PROFIT:

- Goal: to maximize the scientific output and societal impact of LSST
 - Strategy: Use private philanthropy to initiate programs that benefit the LSST community (with extra benefits for LSSTC members).
- Members include ~30 institutions — working together to get the most out of LSST.



- LSSTC has a long relationship with the Project, and works closely with the Science Collaborations.

LSSTC PROGRAMS

- ▶ Enabling Science Small Grants

6th year; 84 projects funded

- ▶ Data Science Fellowship

4th year; high demand



- ▶ Undergrads at PCW



Would have been 3rd year.

- ▶ Workshops with funding competitions

Cadence Hackathon, 2018: \$75k distributed to 42 authors of white papers.

Managing Follow-Up, 2019: seed funding and/or observing time awarded to 15 teams.

2020 ENABLING SCIENCE AWARD RECIPIENTS:

NINE WORKSHOPS, TWO SUMMER STUDENT RESEARCH PROGRAMS, AND ONE DATA CHALLENGE

<https://www.lsstcorporation.org/2020-Enabling-Science-Award-Recipients>

PI: Eric Aubourg, APC / Université de Paris and CEA

Bayesian Deep Learning for Cosmology. \$12,000

PI: Federica Bianco, University of Delaware

PCW 2020 Hack-day and Documentation Sprint. \$1,390

PI: Francisco Förster & Anais Möller, Millennium Institute of Astrophysics and CNRS/LPC-Clermont

Alert Brokers and Their User Community in the Era of LSST. \$2,000

PI: Rachel Mandelbaum & Patricia Burchat, CMU and Stanford

Supporting Interactions between the LSST DESC, Rubin Observatory & LSST Science Collaborations with a Focus on Early Career Scientists. \$12,100

PI: Brian Nord, Fermilab

LSST Undergraduate Internship for Data-Driven Astronomy. \$13,568

PI: Aaron Geller, Northwestern University

Continuing the Connection of LSST Undergraduate Internships with the CIERA REU Program. \$12,000

PI: Andrés Plazas & Federica Bianco, Princeton University - Rubin Observatory and University of Delaware

Workshop on Systemic Racism and its Relation to Equity, Diversity, and Inclusion during the 2021 Rubin PCW. \$6,000

PI: Tyler Pritchard, NYU

Detecting Anomalies, Outliers, and the Unknown Unknowns: Expanding the LSST Time-Domain Discovery Space. \$5,000

PI: Andy Rasmussen, Stanford University, SLAC

Image Sensors for Precision Astronomy 2020/2021 Workshop. \$8,000

PI: Meg Schwamb, Queen's University Belfast

Preparing for LSST Solar System Follow-up. \$8,800

PI: Aprajita Verma, University of Oxford

Preparing for the Statistical Age of Strong Gravitational Lens Science with the Rubin Observatory LSST. \$8,600

PI: Gordon Richards, Drexel University

AGN Data Challenge. \$12,500

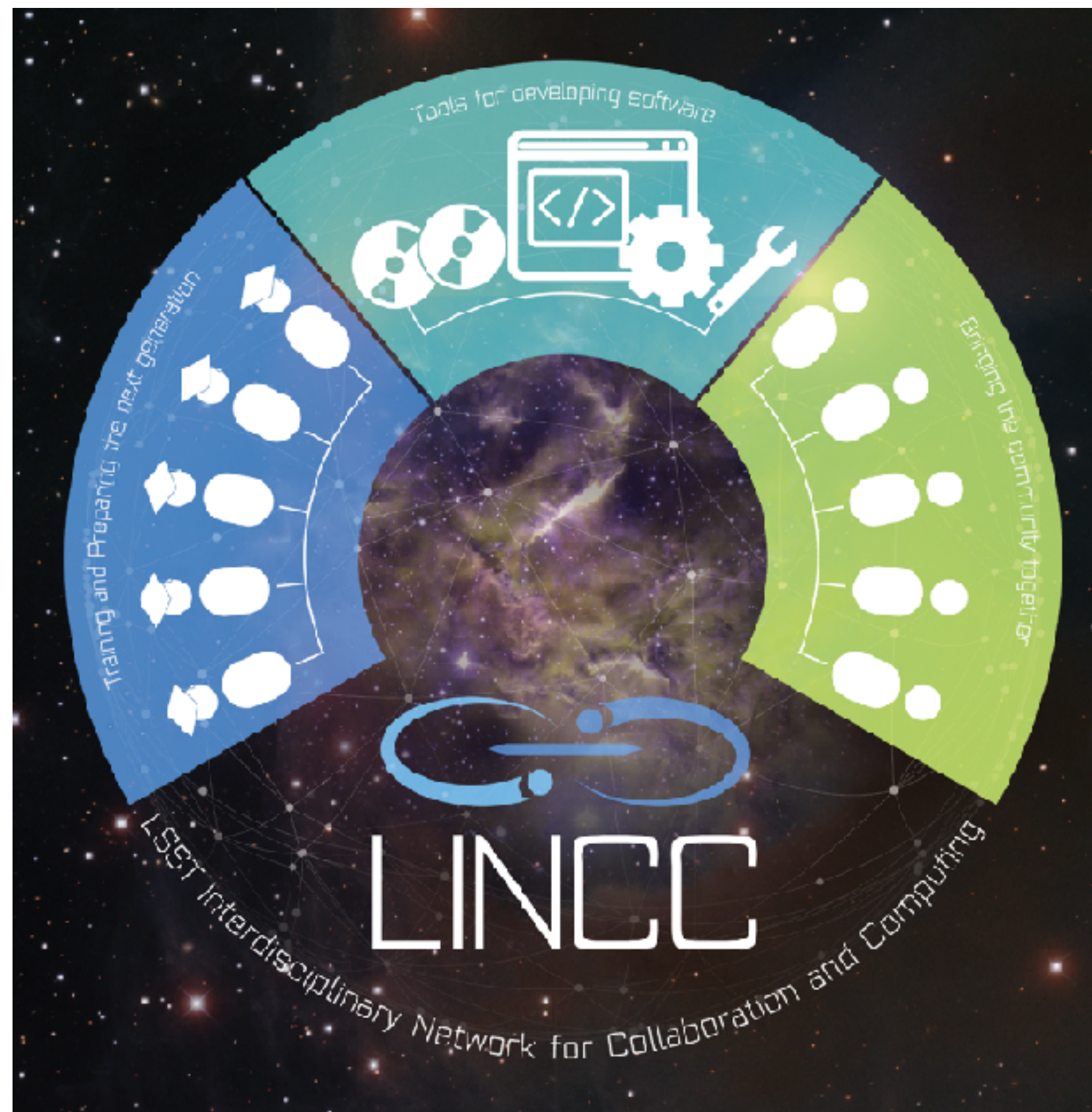
We're aiming
even higher.



ESTIMATED COST TO PREPARE THE COMMUNITY FOR RUBIN LSST: **TENS OF \$MILLIONS**

LINCC: FRAMEWORK TO FUNDRAISE FOR MULTIPLE PROGRAMS

LSST Interdisciplinary Network for Collaboration and Computing



- ▶ Programs, e.g.: 1) postdoctoral fellowships; 2) workshops w/ and w/o seed funding; and 3) incubators and visiting fellowships w/ grant support
- ▶ Administered through a growing network of data science centers with software engineers creating 'user generated' analysis tools.

FEDERAL GRANTS



VS

PRIVATE PHILANTHROPY



- ▶ Clearly defined opportunities
- ▶ Regular, published deadlines
- ▶ Open to all US researchers
- ▶ Strict rules

- ▶ Opportunities must be found or made
- ▶ Donors' interests and constraints fluid
- ▶ Some flexibility, more risk tolerance
- ▶ International, infrastructure ok

We seek private philanthropy for projects with community-wide value that are hard to fund with federal grants.

IDEAS FROM SCIENCE COLLABORATIONS LEADERSHIP

- ▶ Mentorship programs connecting the SCs with HBCUs
- ▶ Online collaboration software platform for follow-up planning and discussion of interesting targets
- ▶ Programs to support international collaborations
- ▶ Regular & innovative-format meetings, such as bootcamps for newcomers to LSST
- ▶ Grants for preparatory work (e.g., cadence optimization, development of widely useful machine learning techniques)

BRAINSTORMING ACTIVITY

NOW, LET'S HEAR FROM YOU

Instructions for breakout groups:

1. Select a time-keeper.
2. Go around and introduce yourselves to each other. Icebreaker question of the day: What discovery are you most looking forward to from LSST? (5 min)
3. Select a moderator to monitor the Zoom chat, and a scribe to take notes, ideally in a Google doc that can be shared with LSSTC later.
4. Spend a few minutes thinking individually about what program, service, or item would be most helpful to you in preparing to do research using LSST data (if the answer is "Money!" – for what?). How similar or different are the answers from various group members? (10 min)
5. Next, can you identify something that doesn't already exist that would benefit ALL OF YOU in your LSST-related research or preparations? (10 min)
6. If you have time: What unconventional program that cannot be funded through traditional funding streams such as NSF grants do you think would be most helpful to the community?
7. Two minutes before the end of the breakout session, please decide on one takeaway from your discussion that your moderator can share on Slack.

SHARE ONE TAKEAWAY

- ▶ Scribes, please share your notes with Kim Briamonte, kbriamonte@lsst.org
- ▶ Moderators, please type one takeaway from your discussion group in the Zoom chat or on the Slack channel.

Thank you for participating!