

# REU Student Orientation

These slides are on our [GitHub page](#).

# Our Role: We're Here for You!

## Aaron Geller & Tjitske Starkenburg

- Support positive mentor-mentee relationships
  - “Open door” policy for both mentors & mentees
  - Confidentiality
- Aaron Office Hours : 8019, Tuesdays 10am-12pm
- Tjitske Office Hours : 8047, Thursdays 1-3pm
- Survey(s)
- IT support / Logistics / Admin
- Running most of the workshops

# Logistics

- Dates: June 21 - August 19 (9 weeks)
- Office + Workshop Space: 1800 Sherman 7<sup>th</sup> floor
- Mentors in 1800 Sherman 8<sup>th</sup> floor or Tech
- Slack + Email (+ Zoom)
- Provided:
  - Quest Accounts + NetID (+ laptops)
  - Stipends + dorm housing

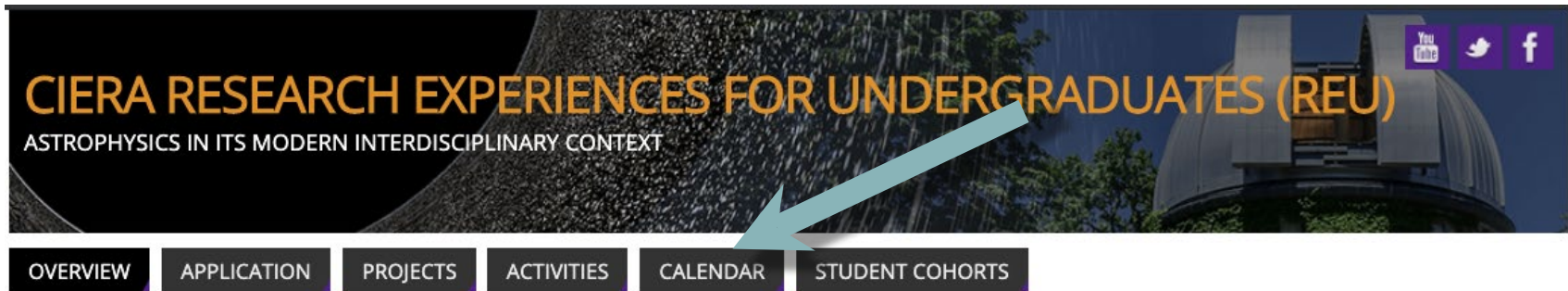
*Note: Lost key = \$250*

# Day 1 (Tuesday, June 21)

- 9:30am - 11:00am: CIERA REU Orientation
- 11:00am - 2:00pm: Campus tour + lunch (you bring/buy)
- 2-5pm:
  - Meet with mentor(s)
  - Complete I-9 form : 1800 Sherman, 1<sup>st</sup> floor 1-100
- 5:30pm: Dinner (CIERA buys)

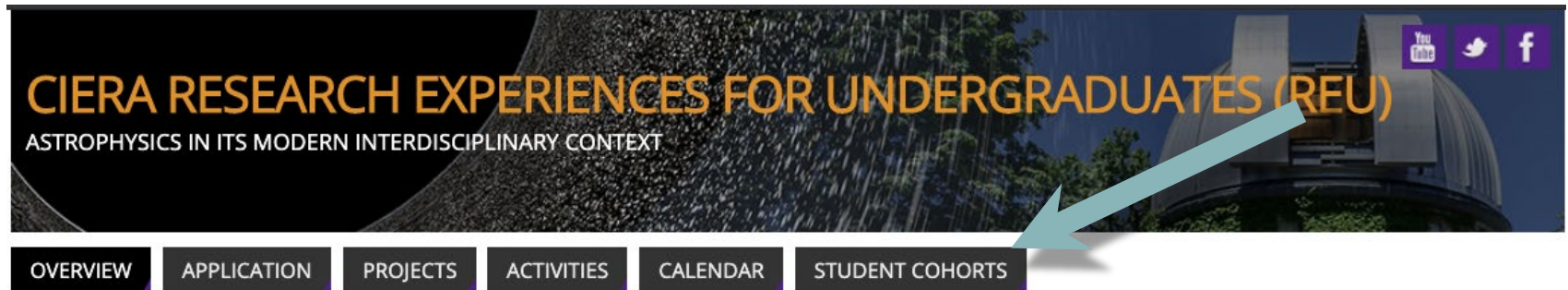
# Professional Development

- Python programming workshops
- Quest, GitHub, command line tutorials (led by RCS)
- Research website, and data visualization workshops
- RCTP science communication workshops
- Research seminars by NU researchers
- Writing workshops
- Grad school + GRE & Career Panel Discussions



# Final Products

- Poster to present at January AAS meeting
  - “Experts” poster session (August 18)
  - “General” poster session (August 19)
- Journal article for RNAAS (let’s publish!)
- Research website, GitHub repo(s)
- Keep working with your advisor(s) remotely!



# Community/Team Building

June 21 : Group dinner

June 24 : Lunch with previous REU students now @ NU

July 8 : Field trip to the Adler Planetarium (+ Taste of Chicago?)

July 15: Picnic at NU Lakefill fire pit

July 22 : Field trip to Fermilab

Aug. 5 : Field trip to Yerkes

Also check here:

<https://www.northwestern.edu/norris/arts-and-recreation/summer-at-norris/index.html>

# Faculty Mentors & Projects

Student	Advisor(s)	Project subject area (general)
Rafael Catena	Aaron Geller	Binary Stars
Dylan Chambers	Alvin Bayliss	Astrobiology
Trevin Cox	Sasha Tchekhovskoy + Nick Kaaz	Black Holes
Micaela Foreman	Giles Novak + Erin Cox	Star Formation
Ian Freeman	Daniel Lecoanet	Stellar Interiors
Dana Kullgren	Fred Rasio + Giacomo Fragione	Star Clusters
Sasha Levina	Vicky Kalogera + Meng Sun	Binary Stars
Ayanna Mann	Adam Miller	Variable Stars
Esther Miller	Elvira Mulyukova	Planetary Dynamics
Erin Motherway	Aaron Geller	Binary Stars
Darshan Patel	Selim Shahriar	Gravitational waves
Edin Peskovic	Wen-fai Fong + Charlie Kilpatrick	Supernovae
Henry Purcell	André de Gouvêa	Neutrinos
Clair Zwicker	Aaron Geller	Binary Stars



# Intro Activity

## **Two Truths and a Lie**

# Communication Options

**Ask your mentor(s) their preferred form of communication.**

We will use the following:

- **Slack**
  - Quick response time, short entries
  - Cohort channel
- **Email**
  - Longer wait time, but more permanent
  - Easier to search
- **Zoom + in-person**
  - Meetings, office hours, etc.

# Communication Options

## Slack Use: Channels

- #general
- #announcements
- #reu2022
- #code and #research
- DMs

# Research Project Best Practices

- Communicating with your Mentor(s)
- Optimizing Your Progress
- Developing Independence

# Diversity, Bias & Stereotypes

**Our Code of Conduct :** [https://github.com/ageller/CIERA\\_REU/blob/master/orientation/CodeOfConduct.pdf](https://github.com/ageller/CIERA_REU/blob/master/orientation/CodeOfConduct.pdf)

- **Impostor Syndrome :**

A psychological pattern in which people doubt their accomplishments and have a persistent, often internalized fear of being exposed as a "fraud". Despite external evidence of their competence, those exhibiting the syndrome remain convinced that they are frauds and do not deserve the success they have achieved. Proof of success is dismissed as luck, timing, or as a result of deceiving others into thinking they are more intelligent and competent than they believe themselves to be. ([https://en.wikipedia.org/wiki/Impostor\\_syndrome](https://en.wikipedia.org/wiki/Impostor_syndrome))

- **Unconscious Bias :**

Learned stereotypes that are automatic, unintentional, deeply ingrained, universal, and able to influence behavior ([https://en.wikipedia.org/wiki/Implicit\\_stereotype](https://en.wikipedia.org/wiki/Implicit_stereotype), [https://en.wikipedia.org/wiki/Unconscious\\_bias\\_training](https://en.wikipedia.org/wiki/Unconscious_bias_training))

- **Stereotype Threat :**

A situational predicament in which people are or feel themselves to be at risk of conforming to stereotypes about their social group. Stereotype threat has been shown to reduce the performance of individuals who belong to negatively stereotyped groups. If negative stereotypes are present regarding a specific group, group members are likely to become anxious about their performance, which may hinder their ability to perform at their maximum level. Importantly, the individual does not need to subscribe to the stereotype for it to be activated. ([https://en.wikipedia.org/wiki/Stereotype\\_threat](https://en.wikipedia.org/wiki/Stereotype_threat))

See also :

<https://csma.aas.org/> , <https://cswa.aas.org/unconsciousbias.html> , <http://www.astrobetter.com/wiki/Diversity> , <https://www.aura-astronomy.org/diversity/>

# Self Care

Actively take care of your body and mind!

- Sleep well and enough
- Exercise (even just going for a walk)
- Keep up with personal hygiene
- Set a schedule and stick to it
- Set realistic goals for yourself
- Schedule non-work activities
- Talk with your cohort about things other than work
- Be kind to yourself

# Safety Reminders

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# Let's go see your office!

