

# EQUITY, DIVERSITY, AND INCLUSION INITIATIVES

DEPARTMENT OF ASTRONOMY, UNIVERSITY OF MARYLAND

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Astronomy PhD student

Multimessenger Diversity Network meeting

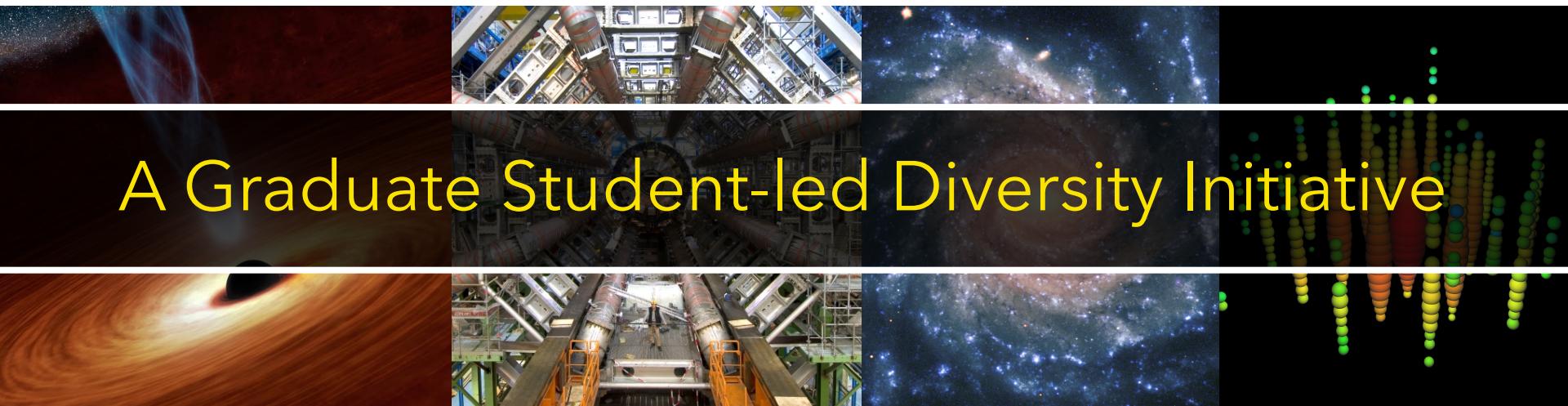
October 16, 2020



- **Graduate Resources Advancing Diversity with  
Maryland Astronomy and Physics (**GRAD-MAP**)**
- **Better Astronomy for a New Generation (**BANG**)**
- **Astronomy Community Engagement (**ACE**)**
- Graduate Student Council
- **Equity, Diversity, and Inclusion (**EDI**) Committee**

# GRAD MAP

Graduate Resources Advancing Diversity with Maryland Astronomy and Physics



**Milena Crnogorčević** - Co-lead (ASTR)  
**Andrew Guo** - Co-lead (PHYS)  
**Amy Steele** - Advisor (ASTR)



UNIVERSITY OF  
**MARYLAND**





# GRAD MAP

*Graduate Resources Advancing Diversity with Maryland Astronomy and Physics*

## Program Goals

- 1. Improve representation of and climate for minorities in the UMD Physics and Astronomy Programs**
- 2. Build a diverse collaborative community amongst the Physics and Astronomy faculty, graduate students, and undergraduate students at UMD and nearby Minority Serving Institutions (MSIs)**
- 3. Provide graduate students mentoring experience with a diverse group of students and experience developing and implementing a program that improves diversity.**



# GRAD MAP

*Graduate Resources Advancing Diversity with Maryland Astronomy and Physics*





# GRAD MAP

*Graduate Resources Advancing Diversity with Maryland Astronomy and Physics*

Sep -  
Nov

## Fall Collaborative Seminar Series

- Visiting MSIs
- Research Presentations
- (one-on-one) Graduate School Interviews
- Graduate School Information
- Graduate School Application Process
- Time Management and Networking



### Schools we tend to visit:

Baltimore City Community College  
Howard University  
Montgomery College  
Morgan State University  
Norfolk State University  
Prince George's Community College



Oct

## Fall Open House

- An evening event at UMD
- Research talks by UMD professors
- Grad students discuss:
  - preparing for grad school
  - grad school life
  - career paths with PhD
- Time for informal discussions, networking (and dinner!)
- Encourage students to apply for the Winter Workshop





## Winter Workshop

- Learn research basics
  - scientific computing, coding (Python)
- Start an original research project with a University of Maryland advisor
- Complete an REU/summer internship application
- Learn about graduate schools and how to apply
- Spend a weekend at the Greenbank Telescope and observe
- Visit local research labs at Goddard, APL, NIST, UMD, etc.





# GRAD MAP

*Graduate Resources Advancing Diversity with Maryland Astronomy and Physics*

June-  
Aug

## Summer Scholars

- 10-week funded summer research program hosted at UMD
- Weekly check-in meetings, journal clubs, and career advancement trainings
- Final research presentations
- Partner with other REU programs at UMD
- Travel funding for external presentations





## Current Involvement

### Graduate Students and Postdocs

Charlotte Ward  
Tomás Ahumada  
Geoffrey Ryan  
Matt Evanusa  
Erica Hammerstein  
Robert Dalka  
Amy Steele  
Milena Crnogorčević

Andrew Guo  
Becca Levy  
Dana Louie  
Sara Frederick  
Carrie Holt  
Deric Session  
Edgar Perez  
Theresa Alexander

Liz Tarantino  
Ginny Cunningham  
Julian Marohnic  
Gabriel Grell  
Joe DeMartini  
Alex Dittmann  
Ben Hord

### Faculty/Staff

Stuart Vogel  
Alberto Bolatto  
Suvi Gezari  
Peter Teuben  
Barbara Hansborough  
Matthew Knight  
Elizabeth Warner

**Physics**  
Daniel Serrano  
Kate O'Neill  
Wolfgang Losert  
Raj Roy  
Jordan Goodman  
Zachary Smith



## Connect with us!

[umdgradmap.org](http://umdgradmap.org)

[grad-map@umd.edu](mailto:grad-map@umd.edu)

The screenshot shows the GRAD MAP website homepage. At the top left is the "GRAD MAP" logo. To its right is the text "Graduate Resources for Advancing Diversity with Maryland Astronomy and Physics" in red. Social media icons for Facebook and Twitter are located in the top right corner. A navigation bar below the header includes links for "Home" (which is highlighted in yellow), "About Us", "Program", "Resources", and "Contact Us". The main content area features two photographs: one of a group of diverse individuals posing outdoors on a wooden deck, and another of a group indoors in front of a "DODGE CITY U.S. AIR FORCE BASE" banner. To the right of these photos is a large graphic for the "GRAD MAP 2015 WINTER WORKSHOP".

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# BANG! Seminar Series

- Better Astronomy for a New Generation! (BANG!)
  - Features speakers and discussions on issues of equity and inclusion, non-academic and academic career paths, soft skills for astronomers, etc.
  - Weekly: alternating between weeks with a speaker and without
- Currently organized mostly by junior members of the department (graduate students and postdocs)
- UMD geography helps: many astronomers and physicists working in private sector, government, etc.
- UMD Office of Diversity and Inclusion, UMD Health Center, UMD Teaching Center, etc. for workshops, as well as facilitation of topical discussions
- Attendance: preaching to the choir?

**Speaker:** Professor Jim Gates (UMCP Physics)

**Title:** Equity Versus Excellence: A False Dichotomy in Science and Society

**Speaker:** Mangala Sharma (NSF)

**Title:** Astronomy and Science Diplomacy

**Speaker:** Gina Quan and Stephen Secules

**Title:** Using Student Perspectives to Understand Equity in STEM Education

**Speaker:** Maggie McAdam (UMD)

**Title:** Technology and Belonging on Campus: Perspectives from Underrepresented Students

**Speaker:** Alexis Williams, Ph.D. & Courtney Cook, M.S. (UMD/TLTC & Women's Studies)

**Title:** Pro-Disability Teaching: Removing the Deficit Model

**Speaker:** Kory Kreimeyer (FDA)

**Title:** Data Science at the FDA

**Speaker:** Dr. Rachel Ivie and Dr. Anne Marie Porter (AIP/SRC)

**Title:** "The Representation and Retention of Women in Physics and Astronomy"

**Speaker:** UMD Office of Diversity & Inclusion

**Title:** How to Have Crucial Diversity Conversations

**Speaker:** Patrick Banner and Adam Ehrenberg

**Title:** Mental Health Task Force

**Speaker:** Kelly Fast (NASA HQ)

**Title:** "Lemons are for Lemonade"

**Speaker:** Various + Special Guest Dr. Daus

**Title:** Thirty Meter Telescope Discussion III

**Speaker:** Laura Blecha (UMD)

**Title:** Why Science is Political

**Speaker:** Dr. Jeffrey Silverman (Samba TV, Data Scientist)

**Title:** From Astrophysics to Data Science

**Speaker:** Pradip Gatkine, Carolyn Kierans, Nathan Roth, Geoffrey Ryan, Eliza Kempton, Drake Deming

**Title:** "Postdoc Panel: Applying for Postdoc Positions in Astronomy"

**Speaker:** William Sedlacek, PhD (Prof Emeritus UMD)

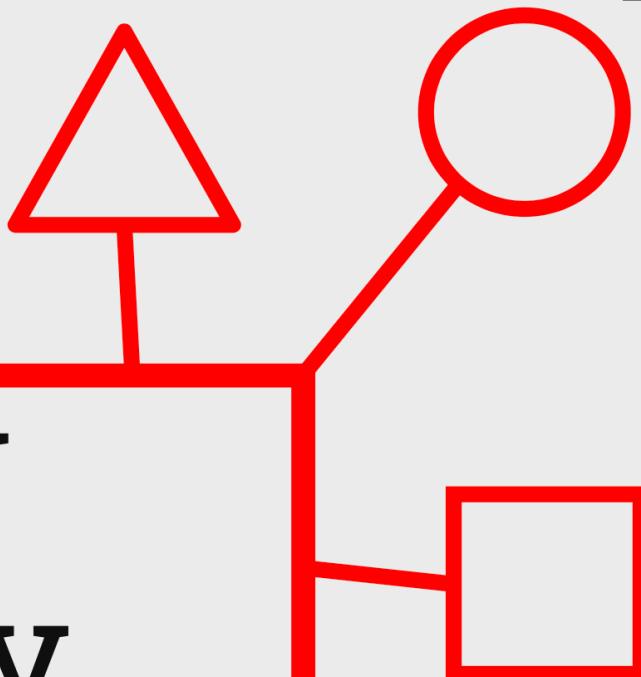
**Title:** Limitations of the GRE and GPA in Selecting and Evaluating Graduate Students: What Alternatives are There?

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# Astronomy Community Engagement



# Astronomy Community Engagement (ACE)

- Formerly known as Astronomy Gentleladies Network (AGN) → evolved into a more intersectional group (changes still ongoing)
- Umbrella organization for multiple subgroups, including Gender & Queer Minorities Group, Ethnic & Religion Minorities Group
- Undergraduate and graduate students: community building, safe spaces, mentorship
- Website: <http://agn.astro.umd.edu/index.html>

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# GRADUATE STUDENT COUNCIL

- Consists of a representative from each year present within the graduate program, with 5+ years having a common representative
- Acts as a liaison between faculty and graduate students (standing bi-weekly meetings with the Chair of the Department)
- Acts as a liaison between graduate students and the University (eg. collective bargaining bill, unionization rights, etc.)
- Primary point of contact for graduate students regarding department structure and policies (or can direct people to relevant resources)
- Examples of initiatives: vacation guidelines for graduate students, research expectations guidelines, etc.

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# EDI Committee

*“The Equity, Diversity, and Inclusion Committee responsibilities include, but are not limited to:*

- Recommending initiatives to raise awareness of issues related to inclusion and diversity in astronomy and related fields*
- Recommending actions the Department can take to broaden participation of under-represented groups in the field*
- Identifying presenters for department-wide colloquia on related topics*

*The Committee is annually appointed by the Department Chair and shall include representation from **Tenured/Tenure-track faculty, Professional-track faculty, Staff, and Graduate and Undergraduate students.**”*

# Examples of actionable initiatives

- Ph.D. Qualifying Exam
  - EDI appointed a faculty committee to examine and make recommendations for the qualifying exam
  - Qualifier was replaced by a more in-depth thesis proposal!
- Interview process
  - Graduate student admission: created rubric
  - Faculty positions: suggested involvement from all ranks
- Graduate Mental Health Survey
  - EDI partnered with physics-led task force to administer first ever survey of the UMD astronomy graduate student mental health
- PGRE optional
  - Recommended and appointed a committee to resolve the PGRE status
- Held accountable through yearly reports
- Webpage: <https://www.astro.umd.edu/EDI/EDICCommittee.html>



Questions?

Thank you for listening!

