

Physics and Astronomy SEA Change

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AAAS SEA Change

Comprehensive project aimed at institutions. Includes:

- A community to discuss DEI
- Institute that has mini-courses to discuss important DEI topics
- Awards program to support institutions in improving around important STEM and DEI areas

More information here:

<https://seachange.aaas.org/>



About the Institutional SEA Change Awards

Complete a thorough self-assessment regarding many aspects including policies around EDI, hiring practices, analysis of career transitions

Create an application with a narrative that includes what was learned, which issues are & are not being addressed, and a plan to address these issues with a **Specific, Measurable, Achievable, and Time-limited (SMART)** plan.

The narrative and plan gets peer-reviewed

Successful institutions receive a Bronze award, good for 5 years. Institutions must make steady progress!
Can renew award after 5 years

Policy, practices, procedures,
climate across an institution



Policy, practices, procedures,
climate within a department

There was a realization that departments needed to be part of the change

Many matters in postsecondary institutions are primarily departmental-level responsibilities.

Examples:

- Grad admissions and hiring
 - What courses are required
 - How courses are taught
 - Departmental culture and climate
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- Systemic change needs to happen in all directions!

In 2017, physics and astronomy professional societies began to explore the possibility of the departmental award. They formed the Physics and Astronomy SEA Change Committee (PASCC)

- The awards and process is like the institutional level awards
- More info on the PASCC history:
<https://womeninastronomy.blogspot.com/2019/11/physics-and-astronomy-stem-equality.html>

Why the professional societies?

- They have reach and respect with the broader physics and astronomy community
- Many are already doing a lot of EDI work

Although led by AAPT (specifically, Beth Cunningham), the PASCC involves...

Physics & Astronomy SEA Change Committee



Beth Cunningham, Executive Officer
Robert Hilborn, Assoc. Exec. Officer
David Marasco, Foothill College
Alexis Knaub, Project Manager for P&A
SEA Change



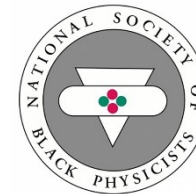
Monica Plisch, Director of
Programs
Erika Brown, Diversity Program
Lead



Stella Kafka, AMS, Executive
Director
Karen Masters, Haverford College



Talat Raman, Univ. Central
FL



Stephon Alexander, Brown
University, President of NSBP
Stephen Roberson, NSBP
Admin. Exec. Officer



Arlene Modeste Knowles, Diversity Project
Manager
Jovonni Spinner, Diversity, Equity, &
Belonging Officer
Rachel Ivie, Senior Research Fellow (non-
voting)



Juan Burciaga, Colorado
College, NSHP Education
Officer



Brad Conrad, Director
James Bogardt, Juniata College



Marcia Lesky, Senior Director
Diversity, Inclusion & Volunteer
Cultivation

Other Affiliate Representative: Carol Hood, CSU San Bernadino, CUR P/A Division

We work in **partnership** with AAAS.

P/A SEA Change and AAAS SEA Change are NOT the same

AAAS SEA Change	P/A SEA Change
Focuses on institution	Focuses physics and astronomy departments
Institutions can become members (costs money)	No membership component
Must be a member to apply for award	No plans to have membership or fee attached to award
More comprehensive programmatic efforts	More modest programmatic efforts
Program designed by AAAS	Program designed by volunteers and staff from P/A

What has the PASCC done, thus far? Pre-2020

Created the PASCC and its structures, including:

- Worked on decision-making structures to ensure all partner organizations have an equal voice, leadership, etc. with flexibility to allow each partner to work within its unique governance structure

Adapted **SEA Change Institutional Bronze award** guidelines and refinements for Physics & Astronomy Departments

- IOP Juno & Landscape of US Physics & Astronomy Departments
- Slow process – 2 years of discussion

Conducted Department Chairs Focus Groups

Applied for pilot funding (AIP Venture Partnership Grant proposal submitted in June 2019)- Received!

What has the PASCC done, thus far? Post-2020

Hired a project manager (Alexis Knaub- me!) in March 2020

Co-creating the program and processes with the collaborating Physics and Astronomy orgs and AAAS. Three subcommittees:

- Application and Awards subcommittee
- Implementation subcommittee
- Sustainability subcommittee

Creating a webinar series to get the word out about promising practices departments might undertake (<https://bit.ly/SEACHangeWebinars>)

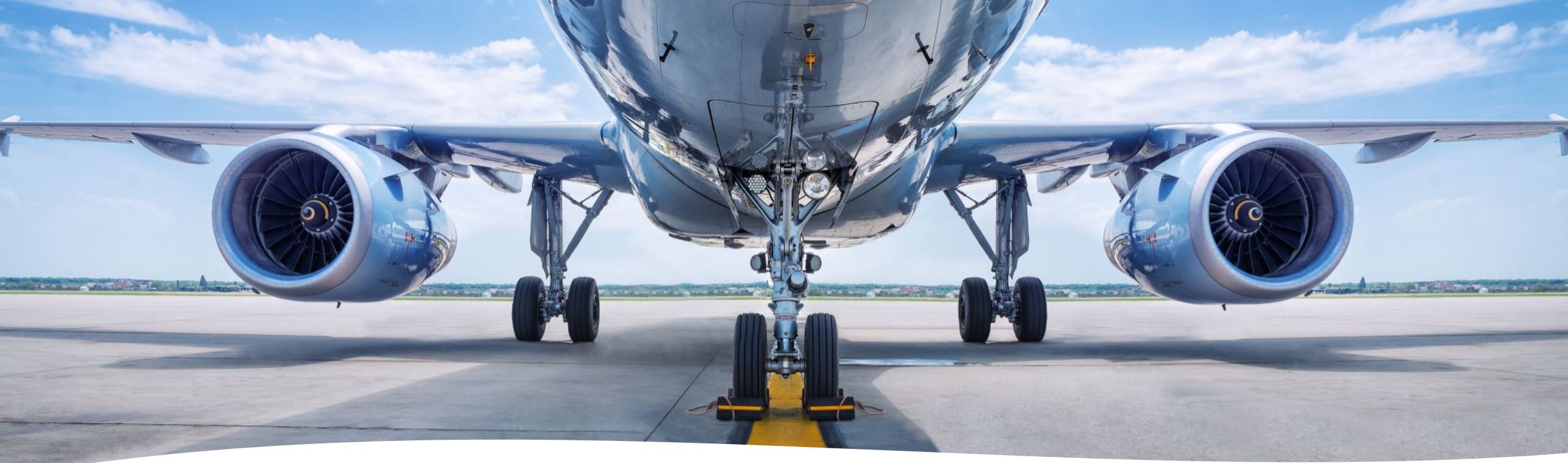
Getting the word out about P/A SEA Change through social media

- Twitter (https://twitter.com/pa_seachange)
- Facebook (<https://www.facebook.com/PhysicsAndAstronomySEACHange/>)

Case Study work on AAAS SEA Change institutional awardees

Focus groups to gain **feedback on self-assessment** from various stakeholder in Physics and Astronomy

And....



Piloting in the departments has begun!

Cohort 1

Began 3 May 2021

Public, MSI, bachelor's
granting dept. in the Midwest

Private, R1, doctoral granting
department in the Northeast

Public, R1, doctoral granting
department in the Southeast

Public, regional, master's
granting department in the
Southeast

Private, liberal arts college in
the Northeast

Cohort 2a

Began 15 February 2022

Public, R1, doctoral granting
department in the Northeast

Public, R1, doctoral granting
department in the West

Public, master's granting
department in the West

Cohort 2b

Beginning in spring 2022

Private, HBCU in the South

Astronomy department in the
Midwest

Tentatively, public MS
granting department in the
Midwest

Why two cohorts?

To make a program that is manageable of many types of postsecondary physics and astronomy departments

A second cohort will allow us to learn more as we seek to include types of departments who are not represented in cohort #1



Ultimately, we want to best serve the departments in this endeavor and not be burdensome. Per their feedback, optional meetups are of interest.

- Two departments in cohort 1 anticipate submitting applications by the end of 2022/beginning of 2023

Departments are encouraged to reach out to me to ask questions, discuss matters, etc. New/other activities and mechanisms for support may be developed, per their interests, needs, etc.

**What have
the pilot
departments
been up to?**

What's next?

- **Sustainability:** What is the model for how this is supported?
- **Scalability:** the US has ~760 physics degree-granting departments – how many can we expect to go through the process?
- **Interface:** Leveraging existing programs (CSWP Site Visit Program, IGEN, etc.) to support the program.
- **Departmental Perceptions:** It may not be readily obvious whether and how the self-assessment is compatible with other EDI activities that the department is engaged in.
- **Unexpected Challenges:** COVID-19 pandemic has introduced numerous constraints to departments

How can you participate or support these efforts?

We are seeking out reviewers for the departmental applications.

If you are interested, please fill out this form to be notified:

https://bit.ly/PA_SEAChange_Reviewer

If you are interested in learning more, feel free to contact Alexis Knaub (aknaub@aapt.org)

- The PASCC for their hard work on this efforts
- AAAS SEA Change, especially Shirley Malcom and Beth Ruedi
- AIP Venture Partnership Fund
- The 10 departments in the pilot
- Those who have been supportive of our other efforts

Thank you