



# International women's day & general strike

8 March 2017

DU Physics & Astronomy Journal Club discussion notes

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# Slide show contents



- Statistics of the field
- Bystander intervention
- SAFE actions
- Accessibility

Why didn't I strike?

Recognition that ability to strike is a privileged position. I'd rather fill the vacuum with discussion that reaches more people.

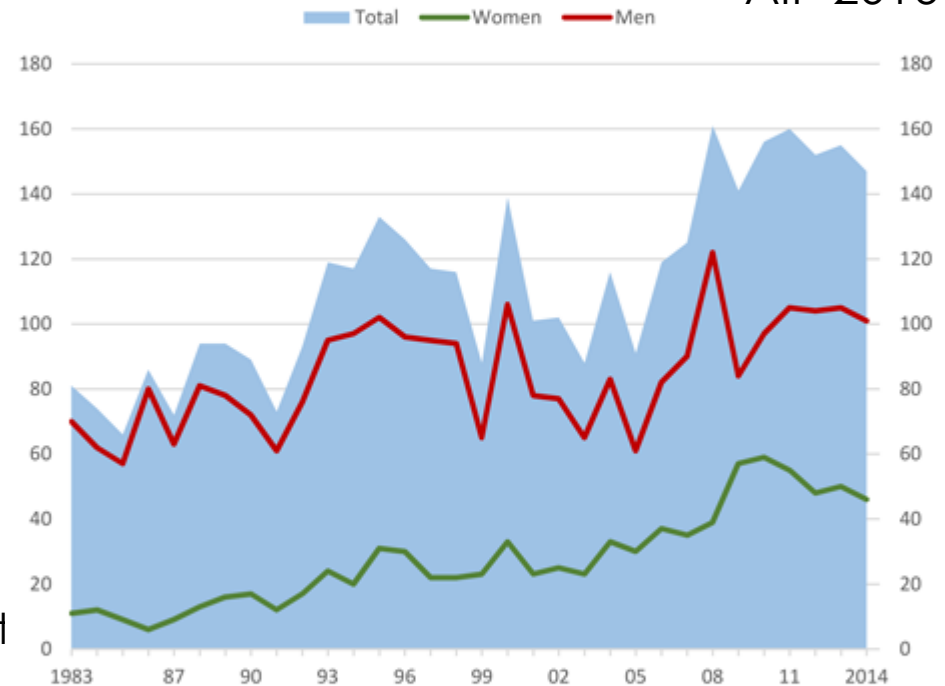
# NSF Statistics (2014/5)



- Women among astronomy Ph.D.'s: 34.6%

## Astronomy PhDs Awarded

AIP 2016



Women, Minorities, & Persons with Disabilities  
<https://www.nsf.gov/statistics/wmpd/>

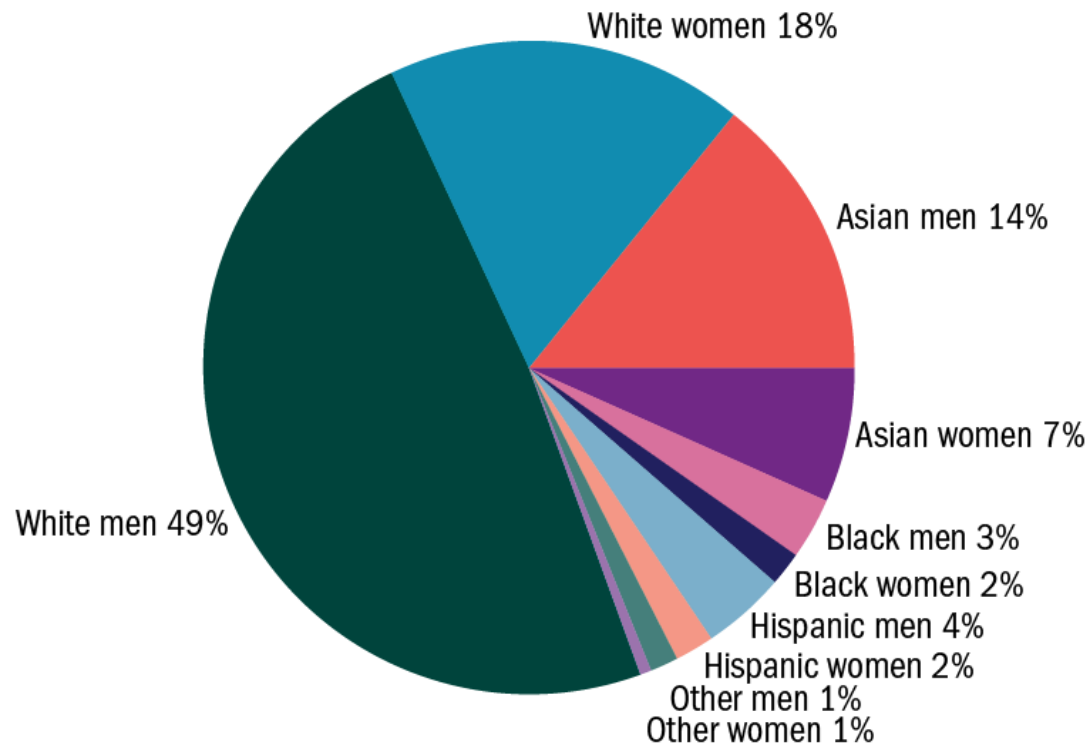
# NSF Statistics (2014/5)



- Women among astronomy Ph.D.'s: 34.6%
- Among astronomy postdocs at academic institutions: 29.0%
- Among employed physical scientists: 27.7%
- Among physical scientists in business/industry: 26.5%
- Among physical scientists in academia (4-yr): 25.4%
- Among physical scientists in federal government: 17.6%

# NSF Statistics (2014/5)

## Scientists and engineers working in science and engineering occupations: 2015



NOTES: Hispanic may be any race. Other includes American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, and multiple race.  
*Women, Minorities, and Persons with Disabilities in Science and Engineering: 2017*

# Biases in hiring



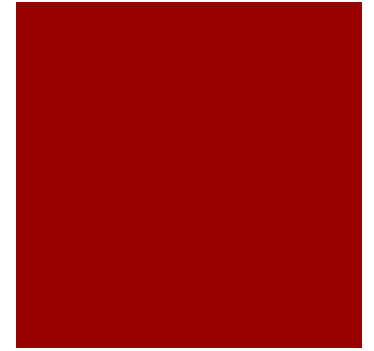
- Potentially underexplored aspect of the “where are the women?” discussion
- Suggested best practice in hiring: setting tone and priorities before the search begins
  - Survey previous years’ hires. Evaluate whether in keeping with goals of department/University
  - Member of cmte should serve as liaison with institutional equity and inclusion office– **establish accountability structure**
  - Commit to being accountable in every search. Save hiring procedure for future searches

# Biases in hiring



- The committee
  - Some studies have shown having just 1 URM on committee improves outcomes for URM applicants
  - A study of faculty promotion (associate to full) in Europe found for every additional female panelist, success rate for women applicants increased 14%
  - Same study found for promotions to associate, no noticeable effect except when panels pass majority women, success rate goes down
  - Anecdotal, diverse committees appear to produce diverse results. Note, diverse committee could be indicative of overall priorities in department
  - Committee should be reminded of unconscious bias before candidate evaluation begins (everyone take implicit bias test)

# Biases in hiring



- Job advertisement wording
  - Women/URM shown to be less likely to apply if they don't check every box
  - Be careful gendered words not used in ad
  - Target ad circulation broadly—never know, next amazing candidate could be at a SLAC!
  - Studies have shown men have “information advantage” in awareness of job openings



# Biases in hiring



- Assessing candidates
  - Establish a rubric in advance- that way no, “I feel John Doe is the best candidate,” can sneak in without basis in criteria established pre-search
    - Uniformly apply rubric to all applicants
    - Every candidate submits same documents
  - Read recommendation letters carefully for bias–
    - gendered language
    - Regional bias
    - Racial bias
  - Be aware level of implicit bias scales with level of position being applied for (\*coughcoughPresidencycough\*)

# Biases in hiring



- Assessment of candidates, continued
  - Be aware of bias in popular evaluation metrics:
    - H-index
    - Student evaluations
    - Publication rates/citation rates
    - Telescope time
    - Funding awarded
  - Bias begins at an early level in one's career and candidates are likely suffering from cumulative effects
    - Male professors shown to be less likely to work with female students

**Be keenly aware of uncompensated, undervalued work done by URM and its effect on an applicant's CV.**

# Biases in hiring



- The short list
  - Critical mass effect: *Chandra* proposal data show once submissions from women reached 25%, so too did acceptance rate
  - Study: if a short list contains only 1 member of underrepresented group, statistical likelihood they will be hired: 0%
  - If there are no applicants from underrepresented group, now is time for accountability check-in with University: why did that happen? Cmte must be able to explain.
- After the hire is made, committee closes accountability loop and reports to University why search was successful or not with regard to initial goals set

# Suggestions to mitigate bias in hiring



- Anonymized first-round evaluation
- Use letters of recommendation as second-round evaluation tool
- Do not discuss candidates in terms of personality
- Prepare a list of questions to review before making offer, go over with committee
  - Was the pool representative of the field?
  - Were contributions by URM underestimated, undervalued, or unfairly attributed to a colleague or advisor?
  - Are assumptions of family roles influencing opinion of candidate's productivity, despite their record?
  - Are women/URM subject to different expectations?
  - Is the ability of a URM to lead a group being underestimated?

# Bystander intervention

- Range of negative behaviors we may encounter:
  - Incivility, bullying, disruptive behavior, social undermining, interactional aggression or microaggressions, abusive supervision and authority
- Why address bad behaviors? They can lead to:
  - Bad climate: feeling unwelcome, unvalued, withholding from engagement, normalization of bad behaviors, decline in productivity/absenteeism, high turnover rate, negative impact on institutional image and financial costs

# Bystander intervention



- Barriers to engaging as a bystander:
  - I didn't know what to say/do
  - No one else was doing anything
  - The person didn't ask for help
  - Concern for myself (safety/status)
  - I have other priorities, not enough time
  - I can't solve everything
  - I don't want to embarrass or offend the person
  - I'm sure perpetrator didn't mean that
  - Not sure I'm interpreting situation correctly
  - Don't want to challenge authority
  - Not sure targeted person wanted help
  - Don't want to make situation worse
  - Not sure my action would make a difference
  - I wasn't even the intended audience for that comment (eavesdropping)

# Bystander intervention




- Identify barrier to action that is holding you back
- Ways to intervene
  - Direct
  - Stealth
  - Now vs later
- Have some 1-liners memorized
- Generally: however you approach it, centering yourself takes attention off of target and allows for neutral engagement based on what you perceived
  - “It seemed to me like this is what happened,”
  - “Hey, I’m sorry I just overheard that, but what you said made me uncomfortable.”

## Suggestions for Addressing Problematic Comments


- Don't take the bait and get into an argument. Instead, remain non-confrontational and keep putting the responsibility for what to say next on the instigator(s).
- Address problematic or inappropriate comments made by individuals in a group immediately whenever possible. This gives the entire group the opportunity to learn from the interaction.
- When it's not possible to address something immediately in a group, follow up with the person who made the comment and then follow up with the group. Be sure to clarify with the person that you will be bringing it back to the group so that s/he is prepared.
- If a comment seems concerning, but you aren't totally clear about what the person meant by it, ask for clarification. (e.g., "I'm a little confused by what you said. Can you say more to help me understand what you mean?")
- Approach the person with empathy and explain why the comment is of concern. It is important to acknowledge that the person didn't intend to be inappropriate or offensive. Regardless of their intent, this gives them the opportunity to save face and do better in the moment or in the future. (e.g., "You may not realize that the comment you made was inappropriate, but I want to address why it's of concern.")
- Avoid attacking someone who makes an inappropriate comment. This will likely put them on the defensive, which reduces the likelihood that the person will actually change their behavior.
- If the comments go from "inappropriate" to targeting someone based on a protected class basis, report it to OIEC.





## Possible one-liners:

- Could you say that again? I'm not sure I heard you right.
- Could you say more about that?
- What do you mean by that?
- I'm not sure I understand what you are trying to say. Can you explain that again? *(If you are okay continuing in the moment)*
- I'm not sure I agree (or I don't agree). What's your evidence for that?
- Really? I'm confused by that. *(The "Really?" response can work as long as it's curious rather than condemning.)*



## Possible one-liners (continued):

- I would appreciate it if you would avoid making overgeneralizations about people.
- I'm confused by what you said. I'll check in with you after the meeting.
- Personal commentary about sensitive topics isn't productive for our conversation.
- I don't really know what to say to that right now. Let's talk about it later.
- Comments like that aren't helpful. Please consider how that might sound to other people.
- That's problematic to say. I think some people might be uncomfortable with that statement, and the nervous laughter (or other signs of tension) I'm hearing tells me they might be.

# Bystander intervention: academic applications



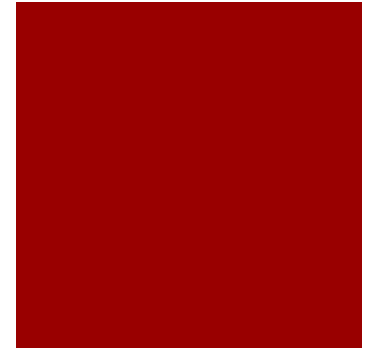
- Ways we can speak up for people being talked over, overlooked
  - Direct: if in a supervisory role and observing it, you have power to set terms of engagement and call out bad behavior
  - Stealth: support the targeted colleague. “Hey, that’s an interesting idea you had, can you tell us more?”
  - Stealth: if person’s ideas only heard when repeated by someone else, when repeated say, “Oh I’m glad you brought Jane’s idea back up, I really appreciated when she said it earlier”
  - Now vs later: could talk to colleague later and ask if they interpreted what happened the same way you did

# Bystander intervention: academic applications



- I consider interventions in academic context=being an ally
  - If you are invited to speak at or notice a meeting you're attending is majority-group dominated, suggest speakers from URM groups. Decline your invite and suggest someone else
  - If you're on a hiring committee and the decision comes down to two equally qualified candidates, one URM and one not, and the deciding criteria end up being "personality fit" or personal acquaintanceship with committee/department members, speak up!
  - Having scripts ready will help in facing the periodic off the cuff inappropriate comment
  - If your department has 90+% white male faculty members, that's a lot of bystanders who could have noticed the imbalance and taken action!

# SAFE actions



- SAFE: Scientists Against a Fascist Establishment
  - Begun by Chanda Prescod-Weinstein, Sarah Tuttle, Joseph Osmundson
  - Recognizing our role as scientists when science itself is often used to reach political, economic, or ideological goals
- What can we do? Today, even?
  - Tenured faculty: use your power to elevate those with less
  - Develop department-level strategies for helping students handle stress, remain productive

# SAFE actions



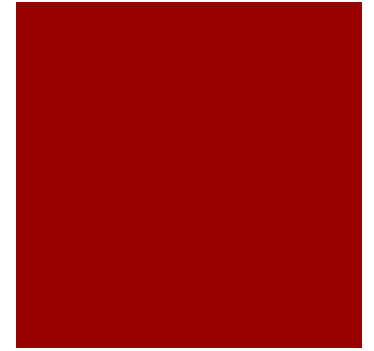
- Work to ensure access for students to mental health resources
- Pressure faculty governance bodies to promote equitable hiring practices
- Support most vulnerable in academic community by any means possible:
  - Ensuring access to, knowledge of available resources
  - Faculty/admins work together to support undocumented students, students with precarious visa situations who may be targeted by new administration
  - Voluntarily Safe Zone training, available at most campuses- gives you language and resources to help LGBTQ students

# SAFE actions -- students



- Built community among students, between institutions and fields
- Get to know journalists– they want to hear from early-career scientists
- Organize and show up to protests: trainees are majority of academia
- Take advantage of freedom of speech not being tenured may afford you
- Volunteer your skills to grassroots organizations (web design, data analysis, writing review, etc)
- Read up on history of scientific community's resistance to political suppression/misappropriation. Be vocal if/as history repeats

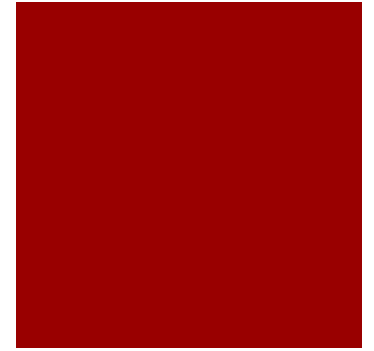
# Accessibility in astronomy



- AAS WGAD (Working Group on Accessibility and Disability)
  - Publication accessibility: AAS Journals/IOP receptive, already working on improvements
  - In progress:
    - Meeting accessibility: recommendations doc, AAS meeting liaison
    - Site visit program forthcoming
    - Database accessibility in beginning phases



# Accessibility in astronomy



- Universal Design you can implement now!
  1. Practice inclusive, person-first language
  2. Use styles in Office, Google docs for formatting: they get subject-level headings correct in accessible way
  3. Use alt-text, but not too much. Bonus: search engines use alt-text!
  4. Don't use text boxes on ppt or word- they register as blank on screen readers
  5. Use templates. They are made to be accessible. Make your own if needed

# Accessibility in astronomy



- Universal design, continued
  6. Check outline view in ppt
  7. Test and then fix PDFs. Don't use PDFs that can't be OCR-d. LaTeX will let you create PDF bookmarks
  8. Describe hyperlinks & be mindful of format (print vs digital)
  9. Caption video content
  10. Think about user experience. Access just means helpful for largest audience possible

Where possible, provide information in as many formats as possible, including the original document (tex or Word); then user can re-format as best suits their needs