AAS Committee on the Status of Women Issue of April 12, 2019 eds: Nicolle Zellner, Heather Flewelling, Maria Patterson, and JoEllen McBride

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By Kathryn Powell

Kathryn E. Powell, Ph.D. is a planetary scientist studying ancient Martian environments with remote sensing and the MSL Curiosity rover. She is currently a postdoctoral scholar at Northern Arizona University and Arizona State University.

Editor's Note: This is one of a series of recaps of the <u>Women in Space</u> conference. Each will feature the viewpoint of someone at a different career stage.

The Women in Space Conference was held February 7 and 8th at Arizona State University's Skysong facility in Scottsdale, Arizona. The meeting brought together planetary scientists, astronomers, engineers, educators, and others under one roof to discuss a similarly diverse set of topics. The conference format was single-track, which mostly effective at keeping all the attendees in the same room for sessions within and outside of our respective fields. The schedule during the main conference days was distributed between keynotes, panel discussions, and clusters of shorter talks. The latter were nominally eight minutes in duration, although that time limit frequently went flying by during the speaker's methods section.

Read more at

https://womeninastronomy.blogspot.com/2019/04/highlights-fromwomen-in-space-2019.html

2. Multiple stories about Katie Bouman and the first black hole image From: Matthew Greenhouse [matt.greenhous_at_icloud.com], JoEllen McBride [joellen.mcbride_at_gmail.com], Heather Flewelling [heather_at_ifa.hawaii.edu] and Alessandra Aloisi [aloisi_at_stsci.edu] There are several great articles about Katie Bouman in the news this week, and several readers sent in articles. Here are a couple of them:

From Time: Meet Katie Bouman, One Woman Who Helped Make the World's First Image of a Black Hole By Katy Steinmetz

"The space was tiny and hot. On a fateful day last summer, Katie Bouman and three fellow researchers filed into a small room at Harvard University, safe from prying eyes, in order to see an image that had been years in the making."

From Oakland News Now: About Katie Bouman Creator Of First Black Hole Image From Event Horizon Telescope By: Zennie Abraham

"Katie Bouman has worked on the imaging project for the Event Horizon Telescope for about 12 years. Katie Bouman (or Katherine L. Bouman) first learned about the Event Horizon Telescope in 2007, back in high school in West Lafayette, Indiana, then pursued it as work in college at the University of Michigan. Now, Dr. Bouman is a post-doctoral fellow at MIT and Assistant Professor at Caltech, the California Institute Of Technology."

From NY Times: How Katie Bouman Accidentally Became the Face of the Black Hole Project By Sarah Mervosh

"As the first-ever picture of a black hole <u>was unveiled</u> this week, another image began making its way around the internet: a <u>photo of a young scientist</u>, clasping her hands over her face and reacting with glee to an image of an orange ring of light, circling a deep, dark abyss. It was a photo too good not to share. The scientist, Katie Bouman, a postdoctoral fellow who contributed to the project, became an instant hero for women and girls in STEM, a welcome symbol in a world hungry for representation."

From NY Post: Meet Katie Bouman, woman behind first black hole photo By: Tamar Lapin

"This is the MIT computer scientist whose algorithm led to the <u>first real image</u> of a black hole. Katie Bouman, 29, has devoted years to the galactic quest and on Wednesday -- when the first image of a black hole and its fiery halo was released -- social media users pushed for her to get her due."

Read more at

http://time.com/5568063/katie-bouman-first-image-black-hole/

https://oaklandnewsnow.com/index.php/2019/04/10/about-katiebouman-creator-of-first- black-hole-image-from-event-horizon-telescope/

https://www.nytimes.com/2019/04/11/science/katie-bouman-black-hole.html

https://nypost.com/2019/04/10/meet-katie-bouman-woman-behindfirst-black-hole-photo/

3. Meet Maria Mitchell the First American to Discover a Comet

From: JoEllen McBride [joellen.mcbride_at_gmail.com]

By Laetitia Meyrueix

"Maria Mitchell spent the best part of 10 years perfecting a diligent nighttime routine: She would climb to the rooftop of her childhood home on clear nights to sweep the heavens with a state-of-the-art telescope, slowly and methodically. It was during one such clear night, on October 1, 1847, after excusing herself from a dinner party, that Mitchell, then 29 years old, <u>saw a blurry streak</u> of light in the sky -- a comet that would propel her to be the only widely recognized and respected female astronomer of her time."

Read more at

https://massivesci.com/articles/maria-mitchell-association-facts
_astronomy-comet-_discovery-american-astronomer/

4. Women in Physics and Astronomy, 2019 From: Rick Fienberg [rick.fienberg at aas.org]

"This report provides a comprehensive overview of the representation and participation of women in physics and astronomy fields. The report describes the representation of women in high school physics enrollment, physics and astronomy degree completions, and faculty employment. In addition, it examines the representation of minority women at some of these levels. The report also examines potential gender differences in salary, job satisfaction, career opportunities, career resources, and family influences on career outcomes. Finally, it identifies points of attrition for women in physics and astronomy between postsecondary education and faculty employment."

Read more at

<u>https://www.aip.org/statistics/reports/women-physics-and-astronomy-2019</u>

5. Sexual Harassment of Women: Climate, Culture, and Consequences in Academic Sciences, Engineering, and Medicine From: Alessandra Aloisi [aloisi_at_stsci.edu]

"In 2016, the National Academies' Committee on Women in Science, Engineering, and Medicine initiated the study <u>Sexual Harassment of Women: Climate, Culture,</u> <u>and Consequences in Academic Sciences, Engineering, and Medicine</u> to examine research on sexual harassment to determine what could be done to prevent it in academic science, engineering, and medicine. While the study was being conducted, the emergence of the #MeToo movement drew broader public attention to the problem of sexual harassment, making the study even more timely and important."

Read more at

https://alltogether.swe.org/2019/04/sexual-harassment-of-womenclimate-culture-and-consequences-in-academic-sciences-engineering-and-medicine/

6. Dem senators introduce bill to combat sexual harassment in STEM From: JoEllen McBride [joellen.mcbride at gmail.com]

This is the Senate version of the House Resolution 36. Both address sexual harassment in STEM.

Read more at

https://thehill.com/policy/technology/437253-dem-senatorsintroduce-bill-to- combat-sexism-in-stem

7. BethAnn McLaughlin: 'Too many women in science have to run the gauntlet of abuse and leave' From: Alessandra Aloisi [aloisi_at_stsci.edu]

By Zoë Corbyn

"Neuroscientist <u>BethAnn McLaughlin</u> is a leading campaigner in the US fight against sexual assault and harassment of women in science, technology,

engineering and mathematics (Stem). Assistant professor of neurology and pharmacology at Vanderbilt University in Nashville, she launched the <u>#MeTooSTEM</u> website in 2018 so women had a place to tell their stories. Her work was recently recognised with an <u>MIT Media Lab Disobedience award</u>, which she shared with two other prominent #MeToo activists."

Read more at

https://www.theguardian.com/science/2019/apr/07/bethannmclaughlin-sexual-harassment-_in-science

8. Stepping up to be a role model for LGBTQ inclusion in science From: JoEllen McBride [joellen.mcbride_at_gmail.com] and Alessandra Aloisi [aloisi_at_stsci.edu]

By Neil Reavey

"A few weeks into the job, a colleague described the issues she had faced working in science as a woman with a wife and children. As individuals who were open about our sexuality at work, we reflected on the difficulties of making the decision to come out. The reality of staying in the closet means never talking about life outside work -- not wearing a wedding ring, not sharing a child's achievements with colleagues or wearing work attire that does not represent one's gender expression. Coming out is not a single event. From starting a new job to joining a new project team or networking at a conference, the casual questions about home life always crop up -- and I constantly fear negative reactions if I talk openly about my husband and our life together.

"My colleague and I also spoke about our anxiety over not knowing whether our identity is affecting day-to-day successes and failures. Is my work being peer reviewed without bias? Are assumptions being made about my ability to influence or lead laboratory groups or projects?"

Read more at

https://www.nature.com/articles/d41586-019-01146-1

9. It's So Damn Hard to Be a Mom in STEM and This New Attrition Stat Proves It From: JoEllen McBride [joellen.mcbride at gmail.com]

As one of that cohort that left STEM, I can definitely relate to all of this. Maybe not the lab part but teaching through a lab or lecture engorged bc I had to prep before class and it was a 10 min walk both ways to the lactation room. I just ran out of time. You can't completely focus on class prep or research bc there is always something you have to remember to do, nagging you. And I won't even get into what it was like dropping off a 10 week old infant at a daycare for 8 hours a day

Read more at

https://www.workingmother.com/its-so-damn-hard-to-be-mom-in-stem _and-this-new-attrition-stat-proves-it

Do more at

https://500womenscientists.org/scimom-journey-resources

10. Paid Family Leave for Postdocs
From:Alessandra Aloisi [aloisi_at_stsci.edu]

By Kate Nautiyal

"Recently, a disappointing <u>study</u> was published in *Proceedings of the National Academy of Sciences* showing that almost half of new moms leave the full-time STEM work-force within a year of becoming a mother. That is a major loss of talent, and a large leak in the pipeline of women in STEM leadership positions. As a new mom myself, I defied those roughly fifty-fifty odds; I am a neuroscientist and assistant professor of psychological and brain sciences at Dartmouth. But I see all around me the real consequences of so many women quitting their STEM careers."

Read more at

https://blogs.scientificamerican.com/voices/paid-family-leavefor-postdocs/

11. Women in Engineering: A Review of the 2018 Literature From: Alessandra Aloisi [aloisi_at_stsci.edu]

"SWE's annual review of the literature summarizing scientific research on women in engineering is intended to promote a greater understanding among engineers of the challenges facing female engineers in what continues to be a male-dominated occupation. Each year, we review the most important research that explores the experiences of female engineers and offers insights into the continued underrepresentation of women in the profession. The hope is that this will help individual engineers recognize that their situation is not unique. We hope, as well, that a better understanding of the factors limiting the numbers of women in engineering and hindering progress toward gender equity will point to solutions that can be pursued, both individually and collectively, by women and men working in the field."

Read more at

https://alltogether.swe.org/2019/04/women-in-engineering-areview-of-the-2018- literature/

12. 10 Unusual Tips For How To Advance Women In STEM, National Academy Of Sciences From:Alessandra Aloisi [aloisi_at_stsci.edu]

By Joan Michelson

"'There are all kinds of tricks people use to demonstrate diversity when they really aren't doing anything about it,' according to Dr. Donna Shalala. We've all experienced this disconnect. Tom Grudin said, 'Don't fix the women; fix the system' (quote source: unknown) These occurred at the National Academy of Sciences, Engineering and Medicine (NASEM) Symposium Highlighting Evidence-Based Interventions for Addressing the Underrepresentation of Women in Science, Engineering and Medicine recently in Washington. They both have deep experience in this area, as do the others who spoke at the Forum."

Read more at

https://www.forbes.com/sites/joanmichelson2/2019/03/31/unusualtips-for-how-to- advance-women-in-stem-national-academy-of-sciences/

Barring Women From Economics From:Alessandra Aloisi [aloisi_at_stsci.edu]

By Teresa Ghilarducci

"Economists extol the theoretical virtues of competition. But in the practice of their own profession, they seem to oppose it, especially in opening up professional economics to women. A recent survey of economists about the profession's climate has documented widespread abuse, harassment and systematic exclusion of women. Almost every other social science and laboratory science has made more progress against these problems than economics."

Read more at

https://www.forbes.com/sites/teresaghilarducci/2019/03/31/ barring-women-from-economics/

14. Multiple Factors Converge to Influence Women's Persistence in Computing: A Qualitative Analysis From:Alessandra Aloisi [aloisi_at_stsci.edu]

By Wendy DuBow, Alexis Kaminsky, Joanna Weidler-Lewis

"Previous research has suggested that access and exposure to computing, social supports, preparatory privilege, a sense of belonging in computing, and a computing identity all contribute to women pursuing computing as a field of study or intended career. What we know less about is what keeps young women persisting in computing despite the obstacles they encounter. This article describes findings from analysis of 64 in-depth interviews with young women who in high school expressed interest in computing Award. The dataset includes award winners and nonwinners, some of whom have persisted in computing and some who have not. The authors' findings suggest that multiple, redundant supports, including community reinforcement, as well as a bolstered sense of identity/belonging, may make the difference in who persists and who does not."

Read more at

https://www.computer.org/csdl/magazine/cs/2017/03/mcs2017030030/ 13rRUwg0pmr

15. Job Opportunities

- Postdoc Opportunity in Planetary Science at University of Central Florida <u>https://www.lpi.usra.edu/planetary_news/2019/04/08/postdoc-</u> <u>opportunity-in- planetary-science-at-university-of-central-florida/</u>

For those interested in increasing excellence and diversity in their organizations, a list of resources and advice is here: https://cswa.aas.org/#howtoincrease

16. How to Submit to the AASWOMEN newsletter

To submit an item to the AASWOMEN newsletter, including replies to topics, send email to aaswomen_at_aas.org

All material will be posted unless you tell us otherwise, including your email address.

When submitting a job posting for inclusion in the newsletter, please include a one-line description and a link to the full job posting.

Please remember to replace "_at_" in the e-mail address above.

17. How to Subscribe or Unsubscribe to the AASWOMEN newsletter

AAS has migrated their email system to Microsoft Exchange. Please watch this space for updated instructions on subscribing and unsubscribing to the AASWomen Newsletter.

18. Access to Past Issues

https://cswa.aas.org/AASWOMEN.html

Each annual summary includes an index of topics covered.