Inclusion, Diversity, Equity, Education & Outreach (IDEEO) Introduction

NuFACT 2022

August 1, 2022 | University of Utah

IDEEO (Working Group 7)

The focus of the working group is on **Inclusion, Diversity, Equity, Education & Outreach** within NuFACT communities.

This year, the IDEEO WG is pleased to promote a schedule of 7 speakers, 1 facilitated discussion, and 1 career workshop touching on all of the topics listed above as part of the regular NuFACT meeting.

IDEEO now an official WG within NuFACT after an initial launch in 2021!

IDEEO (Working Group 7)

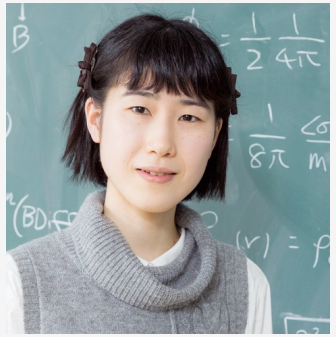
Conveners:

Ellen Bechtol (virtual)

UW—Madison, USA

Francesca Dordei (in presence)

INFN, Cagliari, Italy



Nagisa Hiroshima (in presence)

University of Toyama, Japan

2022 IDEEO Schedule

Thursday, August 4th in White Pine		
11:20-11:40	TBD	Kate Shaw
11:40-12:00	LGBTQ+ Inclusivity in physics and beyond	Anders Knospe
12:00-12:20	Mentoring program initiative by Women in Technology at CERN	Simona Kriva
12:20-12:50	Facilitated discussion on EDI issues in physics and STEM education	Justin Andrew Gutzwa

Friday, August 5th in White Pine		
11:20-11:40	Stimulate IDEEO in Neutrino Education through the IceCube Masterclass	Xinhua Bai
11:40-12:00	Investigating the development of STEM-positive identities of refugee teens in a physics out-of-school time experience	Tino Nyawelo
12:00-12:20	Involving the new generations in Fermilab endeavours	Simone Donati
12:20-12:40	3D visualization of astronomy data using virtual reality	Gilles Ferrand
12:40-12:50	Discussion	WG conveners
18:00-20:00	Negotiation and Communication Skills for Early Career Researchers	Pearl Sandick

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Facilitated Discussion on EDI Issues in Physics and STEM Education

This facilitated discussion will focus on equity, diversity, and inclusion issues in physics and physics education.

Lead by Justin Andrew Gutzwa on Thursday, 12:20-12:50 (White Pine)

Negotiation and Communication Skills for Early Career Researchers

The workshop will focus on negotiation and communication skills useful to physics researchers as they navigate their careers, including how to:

- Negotiate a position in academia, industry, or at a national lab
- Interact positively on teams and with a mentor or advisor
- Think tactically
- Enhance personal presence
- Develop alliances
- Achieve professional goals

Lead by Pearl Sandick on Friday 18:00-20:00 (Ballroom Lobby, Cliff Lodge)

Community planning processes

Snowmass: Community Engagement Frontier included

- 10 submitted papers in the Diversity & Inclusion track
- 5 in Physics Education
- 2 in Public Education & Outreach
- 2 in Career Pipeline & Development

https://snowmass21.org/submissions/cef

Community planning processes

Astro2020 Decadal Survey

First time (!) having a Panel on the State of the Profession and Societal Impacts

Recommendations (briefly and incompletely summarized):

- Increase funding incentives for improving diversity among the college/university astronomy and astrophysics faculty.
- Reinvest in professional workforce diversity programs at the division/directorate levels.
- Implement undergraduate and graduate “traineeship” funding.
- Continue and increase support for postdoctoral fellowships that encourage development of scientific leaders who advance diversity and inclusive excellence.

Community planning processes

Astro2020 Decadal Survey cont…

- Funders and professional societies should ensure their policies address harassment and discrimination.
- Establish a consistent format and policy for regularly collecting, evaluating, and publicly reporting demographic data.
- Include diversity in the evaluation of funding awards.
- Define and establish a community-based astronomy model

https://nap.nationalacademies.org/read/26141/chapter/5#115

Why IDEEO

The Number of Doctorates Earned in Physics, 2014–15 to 2018–19

Number of Doctorates Earned in Physics by People who are:	2014–15	2015–16	2016–17	2017–18	2018–19
American Indian or Alaska Native men	5	0	1	2	2
American Indian or Alaska Native women	0	1	0	0	0
Asian men	56	55	61	66	70
Asian women	17	20	19	18	27
Black or African American men	13	15	16	8	8
Black or African American women	5	9	3	4	1
Hispanic or Latino men	34	40	50	42	40
Hispanic or Latino women	10	5	7	11	10
Native Hawaiian or Other Pacific Islander men	2	1	1	1	1
Native Hawaiian or Other Pacific Islander women	0	0	0	1	0
White men	639	650	648	609	651
White women	135	142	115	165	123
Two or more races men	9	11	11	24	22
Two or more races women	1	8	6	6	6
All Other Race/Ethnicity and Gender Combinations (NonResident Alien and Unknown)	915	889	894	923	914
Totals:					
Non-White Only	152	165	175	183	187
White Only	774	792	763	774	774
Grand Totals:					
Men	1,474	1,489	1,511	1,478	1,497
Women	367	357	321	402	378
All	**1,841**	**1,846**	**1,832**	**1,880**	**1,875**

https://www.aip.org/statistics/resources/number-doctorates-earned-physics-2014-15-2018-19

Why IDEEO

The majority of physics PhDs in the U.S. go to white men.

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Why IDEEO

There has not been change recently in the number of non-white men earning PhDs in physics in the U.S.

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Equitable resources and opportunities

"Scientific excellence is achieved by people, and people are at their best when they are treated well. The only way to ensure our scientific community reaches its full potential is to ensure that *every single one* of its members has equal access to resources, education, and career opportunities."

From "Building a Culture of Equitable Access and Success for Marginalized Members in Today's Particle Physics Community." by K.A. Assamagan, O.M Bitter, M-C Chen, A. Choi, J. Esquivel, K. Jespen, T.R. Lewis, A Muronga, F. Psihas, L. Walkowicz, and Y. Zhang.

Moral imperative

"While it is true that the physics community as a whole loses when it routinely bars certain demographics from entering and contributing, what matters here is that black women *deserve* a seat at the table for no reason other than they have an interest they want to pursue. BIPOC people deserve to be welcomed to and respected in the physics space, and any space they may choose to inhabit.

However, welcoming and respecting must be the first steps taken, not the only steps."

From "Policing and Gatekeeping in STEM: Safety, Security & Sanctity" by A.K. Hodari, S.B. Krammes, C. Prescod-Weinstein, B.D. Nord, J.N. Esquivel, and K.A. Assamagan.

Homework

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For individuals:

(1) What are the steps being taken beyond welcoming and respecting that are shared here this week in the IDEEO sessions?

(2) How can you learn from others and apply a similar program, approach, or method in your experiment, collaboration, institution, and/or community?

For the conference:

(3) How can we take the principles in IDEEO and apply them through all aspects of NuFACT?

Homework

Engage and continue conversations in the NuFACT Slack workspace at

#wg7-inclusion-diversity-equity-education-outreach

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