#### **NuFACT 2022**

# WG7: IDEEO summary

Inclusion, Diversity, Equity, Education & Outreach

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6 August, 2022

### WG7 talks:

7 talks, 1 facilitated discussion, 1 career workshop

- Kate Shaw "Widening the talent pool for physics worldwide"
- Anders Knospe "LGBTQ+ Inclusivity in Physics and Beyond"
- Simona Kriva "Mentoring program initiative by Women in Technology at CERN (WIT)"
- Xinhua Bai "Stimulate IDEEO in Neutrino Education through the IceCube Masterclass"
- Tino Nyawelo "Investigating the Development of STEM-Positive Identities of Refugee Teens in a Physics Out-of-School Time Experience (INSPIRE)"
- Simone Donati et al. "INVOLVING THE NEW GENERATIONS IN FERMILAB ENDEAVOURS"
- Gilles Ferrand "3D visualization of astronomy data using virtual reality"

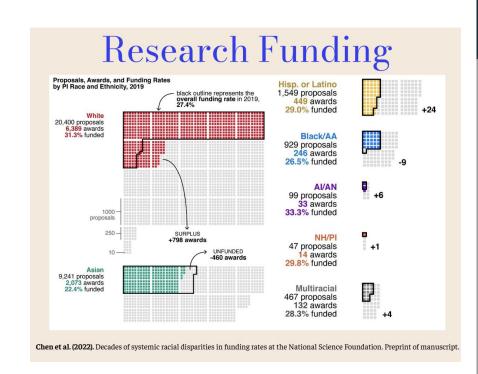
Thank you very much for your contribution and attention!

# WG7 activity: Facilitated discussion

#### Justin Andrew Gutzwa

# "Centering Identity & Equity in Physics & STEM Education"

- Be cautious about the systemic inequity.
- Then, how can we center equity?



# WG7 activity: Career workshop

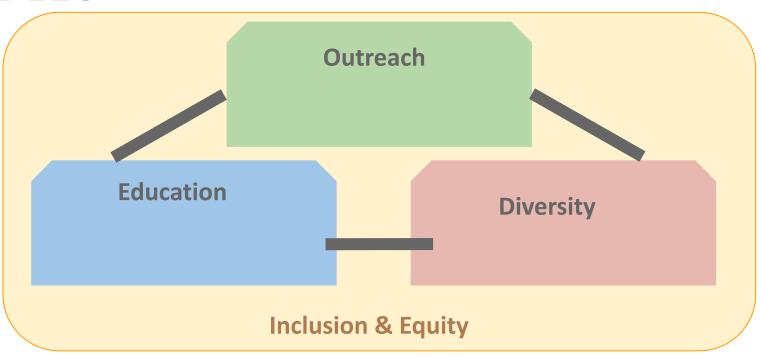
#### **Pearl Sandik**

#### "Negotiation and Communication Skills for Early Career Researchers"

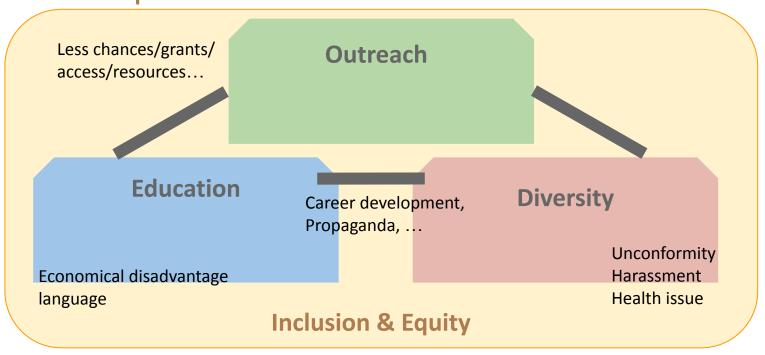
- Very participated informal workshop in front of a slice of pizza and online
- Many early career scientists but not only...
- Many activities done interactively with many questions raised!
- Something to be be repeated in next workshops!



# **IDEEO**



# IDEEO: problems we have



# Diversity: Examples and hints of actions

#### **Activities at CERN**

• Women in Technology (WIT) mentoring program

S. Kriva

LGBTQ+ network for welcoming environment for everyone

A. Knospe

 Physics Without Frontiers network : providing annual school, online lectures, supports, role model images,...

K. Shaw

Diversity = Power, push forward to more diversity in physics community

# Diversity: Let us start with...

- Be cautious about the problem
- Listen to the concerns of our colleagues
- Educate ourselves
- Advocate for code of conduct
- Respect people's pronouns
- Use non-discriminating terminology
- Share information
- Start networking
- Participate in activities to obtain better environment for everyone
- Find/Join the mentoring programs
- ...

Take chances to be the best version of yourself at NuFACT 2022

### Outreach: various possibilities

3D visualization and gaming activity using astrophysical research data at open lab. G. Ferrand

#### **Communicating with society and younger generations**

- INSPIRE program (U. Utah & Utah-State U.): STEM experience at out-of-school T. Nyawelo
  - o 28 students
  - Building cosmic-ray detector and documentary film

#### Addressing underrepresentation with STEM-related identity development

IceCube Master Class:

X. Bai

- Starts from 2018, ~50 participants/year
- One-day course

Achieving engaged, inclusive, diverse environment in the field

#### Education

- Physics Without Frontiers network: providing annual school, online lectures, supports, role model images,... <u>supporting talented ones in conflict countries</u>
  - Over 10,000 Students, 50 Countries
  - Over 200 students mentored to further study

#### **Towards more diversity in physics community**

- Italy @Fermilab: training program for master student in connection between Italy-Fermilab
  - From 1884, Over 500 Students, mainly from Italian institutes
  - 9 week professional research in multidisciplinary internship
    (Physics and applied physics, engineering, material or computer science)

Supporting professional career achievements



K. Shaw

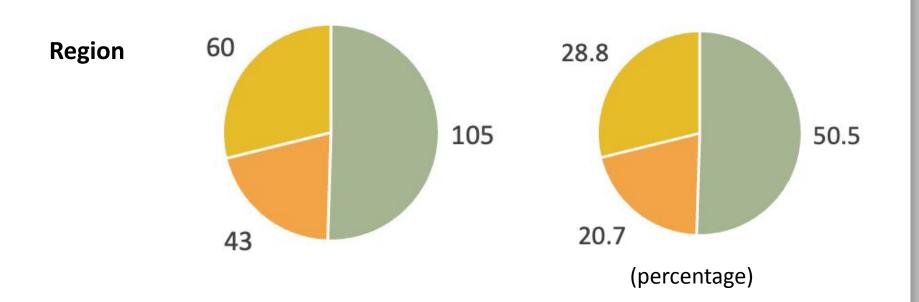
nal Exam at UNIP

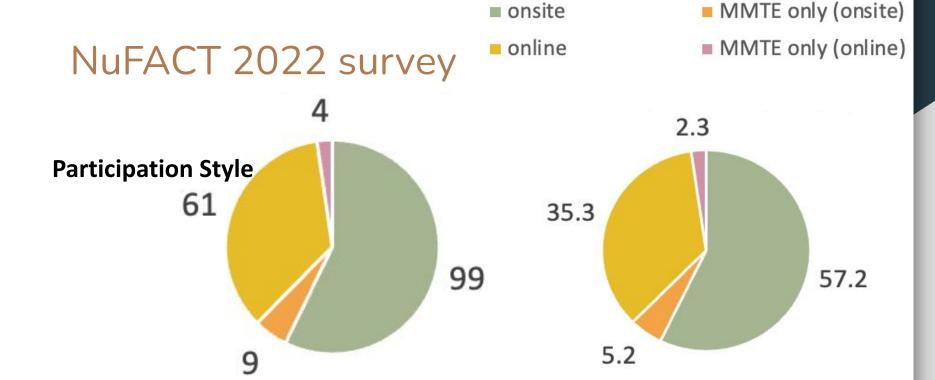


### Remember our Homeworks

- (1) What are the steps being taken 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?
- (3) How can we take the principles in IDEEO and apply them through all aspects of NuFACT?

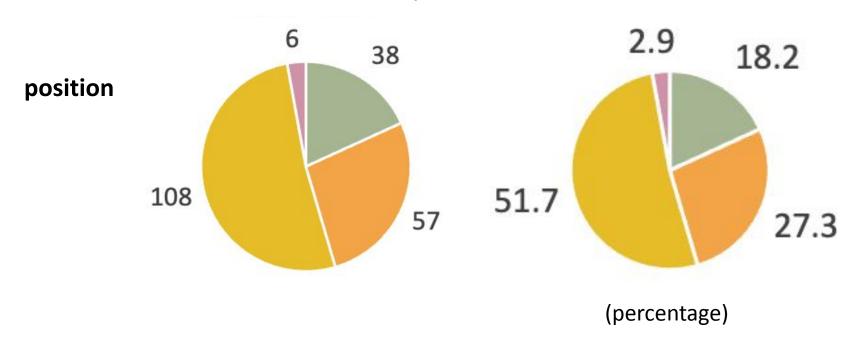
# NuFACT 2022 survey





(percentage)

# NuFACT 2022 survey



### What we learnt from NuFACT 2022

- WG7, Inclusion, Diversity, Equity, Education & Outreach, has completed its first year activity with many supports and contributions.
- We believe that our activity motivate the well-being of ourselves and our communities by providing a chance to think about it.
- Two special workshops, one about the EDI issues and the other about career developments, were successful with many participants.
- We better understand the current situation of the NuFACT community about this topic.
- "Code of conduct" violation was not found.

### Towards NuFACT 2023

- We hope to have plenary talks of WG7 in the next year, similarly to other WGs so that all of us can attend the session.
- Please take the things you have reasoned about during IDEEO in NuFACT 2022 to your institute, share with your colleagues, and improve towards the future.
- We are looking forward to having lots of contribution talks in NuFACT 2023 for IDEEO session, as well as planning interesting activities that participants can easily join.

### Homework for all of us

- (1) What are the steps being taken 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?
- (3) How can we take the principles in IDEEO and apply them through all aspects of NuFACT?