## International Women's Day

Women and Queer People in Physics Society

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### Definitions

- **Woman:** someone who identifies as a woman
- <u>Queer person</u>: a person who is not heterosexual and/or not cisgendered
- <u>**Cishet person</u>:** a cisgendered and heterosexual person</u>

Paraphrased, Source: <u>Cambridge dictionary</u>

## Claim

#### A strong framework of solidarity between women and queer people is needed for women's liberation.

#### First wave of feminism

- + Voting
- + Working
- + Education
- + Property ownership

- Didn't achieve equity
- Failed to address core structures that subjugated women

#### Second wave

- + Equal Pay Act
- + Contraception
- + Sexual liberation

- Still excluded POC
- Excluded genderqueer people

#### Third & fourth waves

- + Intersectionality
- + Internet activism

- Excludes people without internet access

### **Bigger picture**

# **Women and Queer People in Physics**

## <u>Women and Queer People in</u> <u>Science</u>

#### Challenges faced by Women and Queer People

- 'The Leaky Pipeline'
- Only 31% of STEM students in the UK are women, and 26% of the scientist workforce are women
- 'The Glass Closet'
- 22% more likely to have felt nervous or stressed from work, 31% more likely to have felt socially excluded by colleagues, and 32% more likely to have thought about leaving their job
- Worse physical and mental health experiences compared to non-LGBTQ+ colleagues

#### Why?

- Implicit biases and overt discrimination
- Social exclusion and professional devaluation
- Lack of role models
- Nature of work
- Lack of support
- Harassment and hostile work environments
- Coming out may negatively affect retention

#### Solutions

- Inclusive spaces and open discussion
- For workplaces to collaborate with staff for best practices
- Collaboration with institutions such as the United Kingdom's Institute of Physics, Royal Astronomical Society and Royal Society of Chemistry
- Collaboration with charities and organizations such as: Stonewall, Pride at STEM, Women in STEM, Nature and Science Journals, Girls Who Code
- Gender-neutral bathrooms
- Respecting preferred pronouns
- Keyword: Welcoming!

## **Benefits of Diversifying Practitioners of Science**

#### Innovation and Creativity

- Teams with varied backgrounds bring unique viewpoints, experiences, and problem-solving methods.
- Hong and Page (2004) found diverse groups outperform homogeneous ones in problem-solving.
- Cognitive diversity leads to more effective solutions and innovative outcomes.
- Cross-cultural, gender, and interdisciplinary collaboration fosters creativity.
- Challenges conventional thinking and leads to breakthroughs in science.

#### **Equity and Representation**

- Inclusion ensures research addresses issues affecting all demographics.
- Marginalized groups face barriers in STEM; diversity helps bridge the gap.
- A more equitable research landscape benefits society and inspires future scientists.

#### **Better Working Environments**

- Inclusive workplaces foster respect, reduce discrimination, and enhance teamwork.
- Ely & Thomas (2001) found diversity improves collaboration and job satisfaction.
- Valued individuals contribute more effectively and remain engaged in research.

#### **Broader Societal Impact**

- Diversity influences public policy, healthcare, and technological progress.
- Page (2007) demonstrated that diverse teams enhance decision-making and innovation.
- Climate science benefits from diverse teams—IPCC findings show improved accuracy in climate models.
- Inclusive research leads to more effective solutions for global challenges.

# **Women and Queer People in Physics**