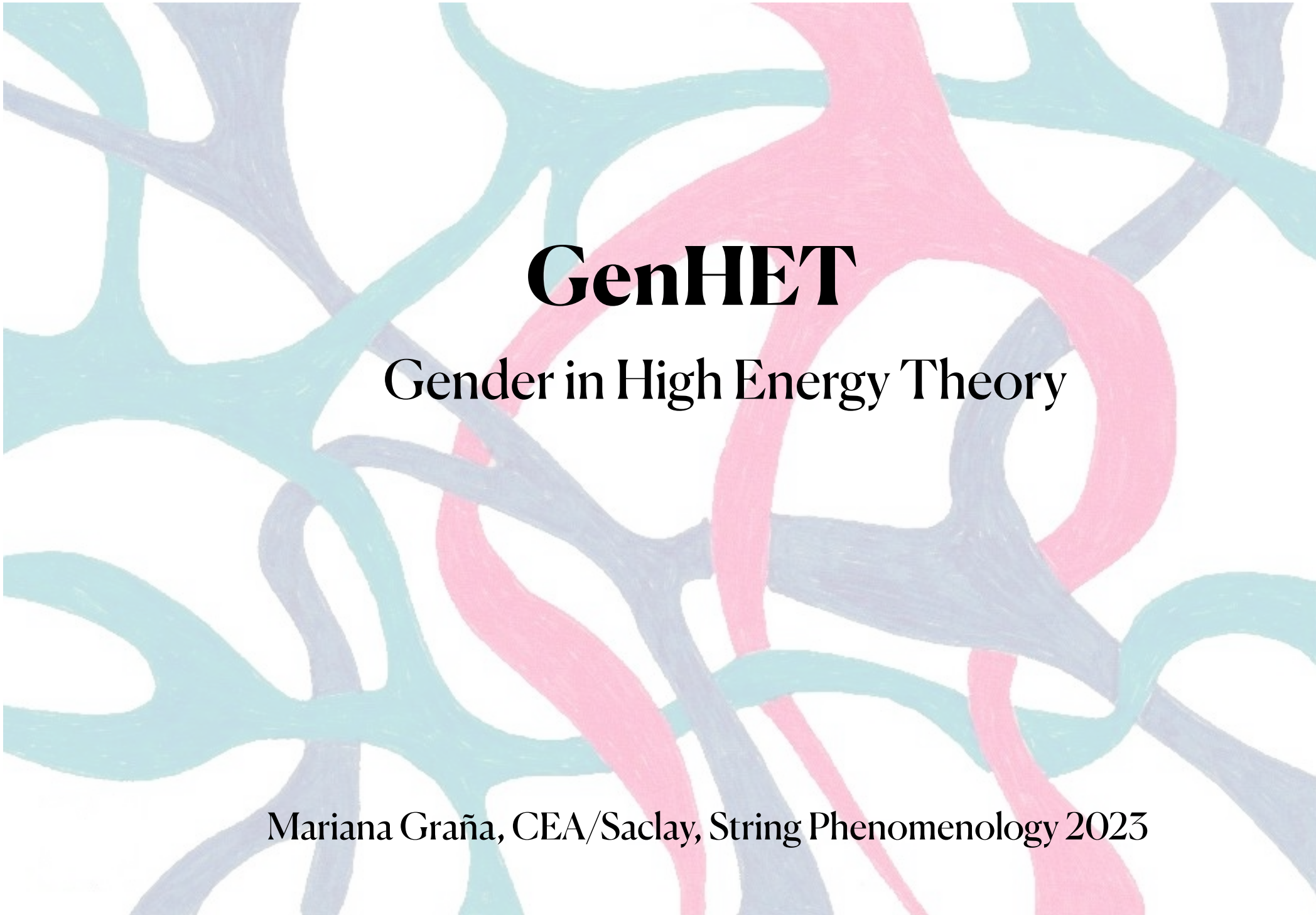


GenHET

Gender in High Energy Theory

Mariana Graña, CEA/Saclay, String Phenomenology 2023

What is GenHET?

- Permanent working group hosted by CERN Theory Department

- 270 members (male and female)

  -Steering committee (string theory part): A. Bissi, A. Castro, V. Giangreco Puletti, A. Gnecchi, M. Graña, M. Larfors, S. Penati, E. Pomoni, M. Taylor, Y. Lozano

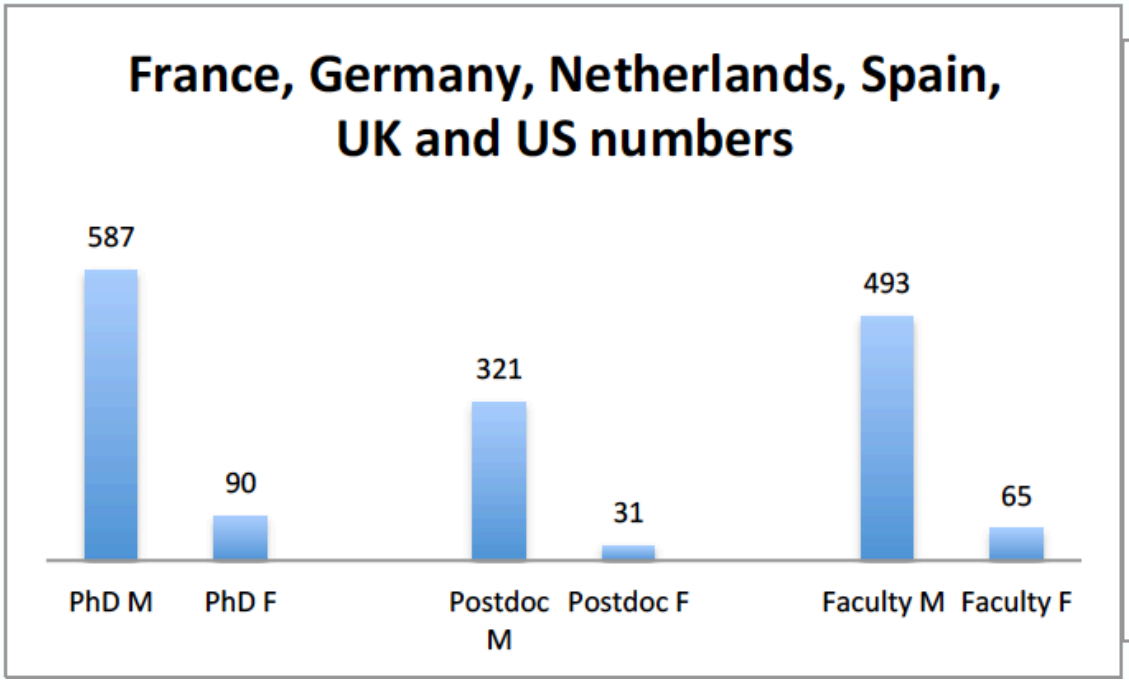
- Main objectives are to monitor the situation of women in High Energy Theoretical Physics, increase the awareness of gender issues in the field, improve the visibility and presence of women in decision making roles and providing networking, support and mentoring, particularly to early career researchers.

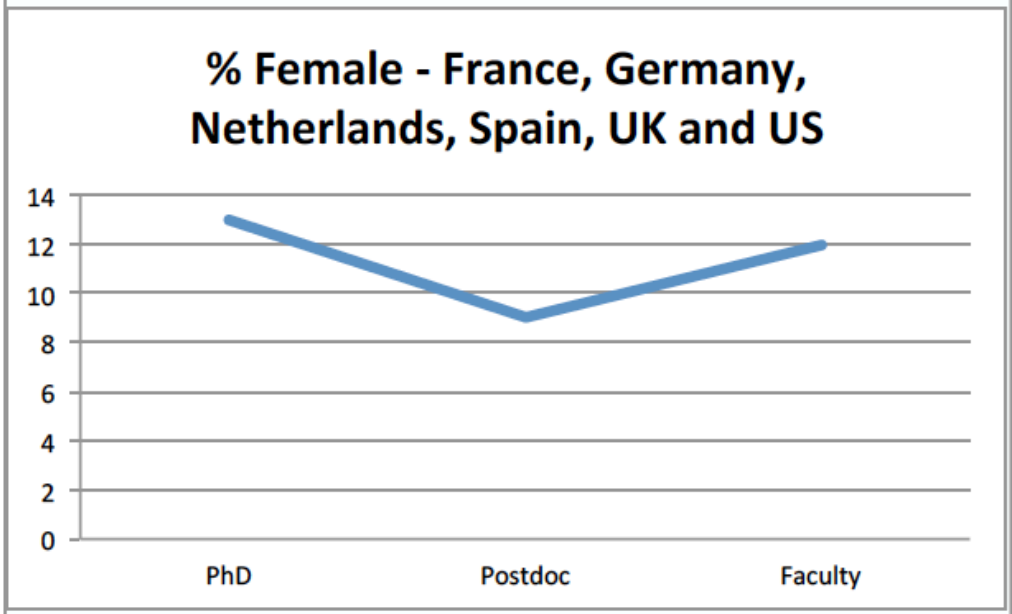
- Several activities to pursue these objectives

https://genhet.web.cern.ch/

Statistics on gender in the hep-th community

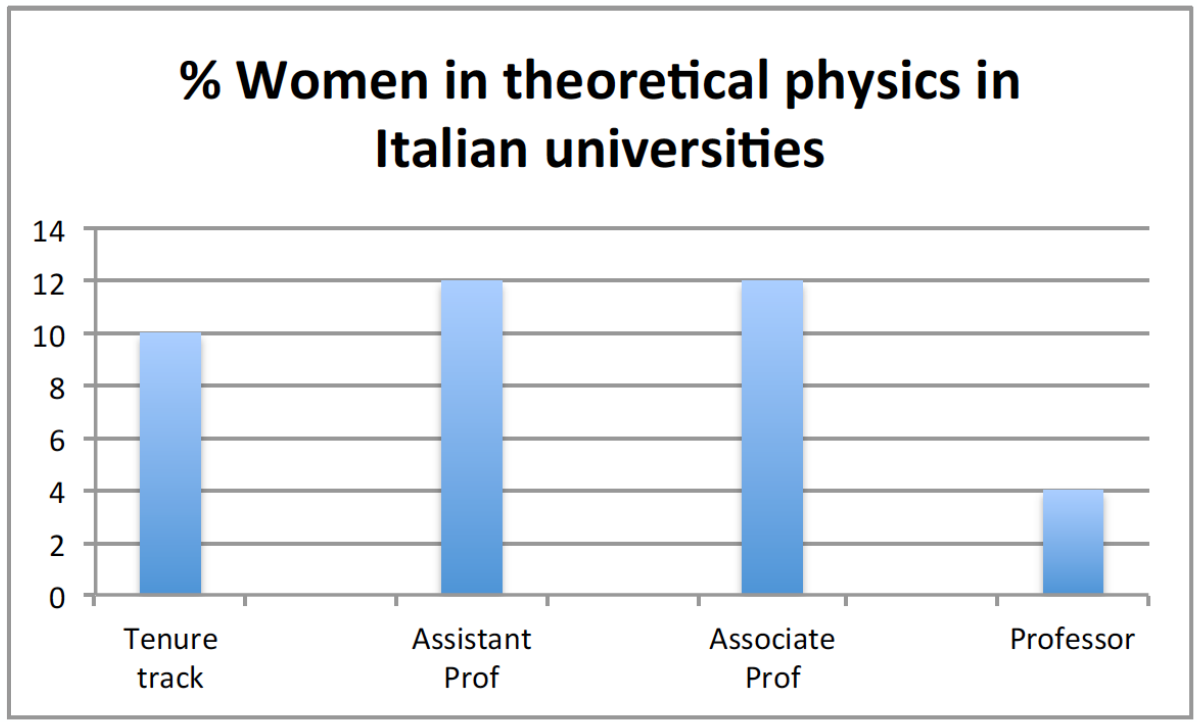
- One snapshot of 2017, we need more data! Help is welcome!





- Percentage of women in hep-th is lower than in physics as a whole, e.g. in US ~20% female physics PhDs, ~15% physics faculty

Variations by rank: glass ceilings



- Around 5% of US physics department chairs are women

Pre-GenHET:

Working group on gender issues in string theory

Started with an EU project 2013-2017, chaired by Silvia Penati & Yolanda Lozano

MPNS COST Action MP1210

The String Theory Universe

Descriptions are provided by the Actions directly via e-COST.

Although String Theory has been around for more than forty years, it has never been so important for physical reality as it is now, due to its novel outstanding applications to different areas of Physics and Mathematics.

While the Large Hadron Collider (LHC) narrows down the experimental limits on supersymmetric particles and satellite missions such as WMAP and PLANCK probe the very early Universe, this Action aims at creating a strong European Network focused on fundamental, forefront research exploring the role played by String Theory in Particle Physics, Cosmology and Condensed Matter Physics.

The large majority of European world experts in String Theory will be involved in this Action. This will ensure a top quality research output, achieved through an intense exchange of expertise, intra-European collaboration and co-organization of scientific activities.

The Action will ensure fair gender representation and simultaneously adopt specific measures for promoting the involvement of women scientists at all levels. Moreover, it will foster the active participation of junior excellent scientists.

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This Action:

- Promoted the active participation of women (leading positions, speakers, members of scientific and organising committees)
- Made the community aware of many important studies about women in STEM, unconscious gender bias, gender stereotypes,..
  - Gender events as part of many major scientific conference/workshop
  - Workshops on "String Theory and Gender"
- Conducted several surveys to know the opinions of the community
- Built a synergic network of women string theorists
- Resulted in a permanent working group: GenHET

https://genhet.web.cern.ch

Activities

Annual meetings (Valencia 2015, Paris 2016, CERN 2018, Nordita 2019, COVID, ... 2024)

Slack channel and on-line meetings

Support for early careers

Newsletter

Theatre plays

Activities in major conferences (String pheno, Strings, Eurostrings...)

Mentoring program

@ String community

Coordinated by MG, Michela Petrini and Irene Valenzuela

Precious help from: Saskia Demulder, Makarius Tahim,
Stephanie Baines, José Calderon Infante, Alvaro Herraez, Gregoire Josse

Yearly program, launched in September 2022

https://sites.google.com/view/mentoring-program-string-th

Mentoring program

@String community

Apply for 2023

Mentoring is a voluntary and confidential relationship: an experienced person (the mentor) accompanies and supports the development of a less experienced person (the mentee)

Program open to anyone, with special emphasis given to **underrepresented groups**

Apply as a mentee

- Master students
- PhD students
- Post-docs
- Faculty

Apply as a mentor

- Post-docs
- Junior/Senior Faculty

- 38 Pairs mentor/mentees in 2022-2023 academic year, which met monthly

- Most discussed topics according to the monthly feedback form:

  -Academic career development

  -Work/life balance

  -Networking

  -Time management

  -Self-esteem

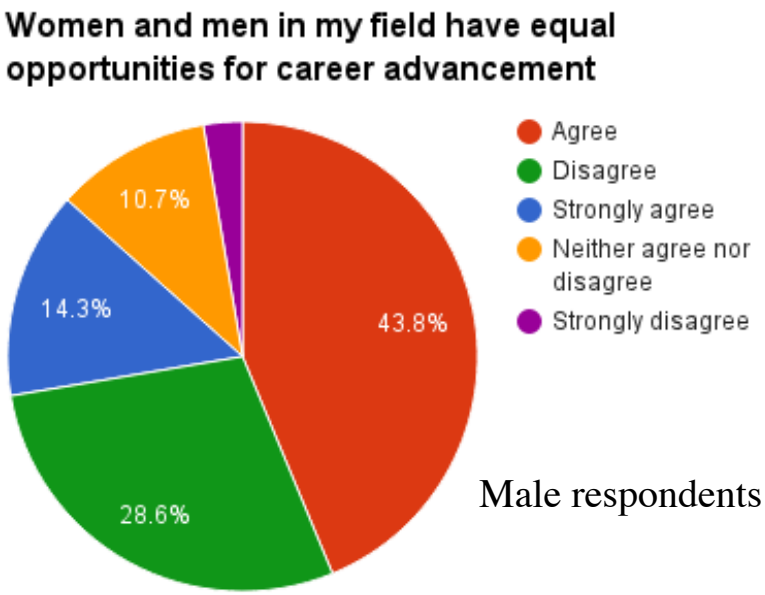
- Program starts again in September 2023

  -88% of this year's participants want to continue!

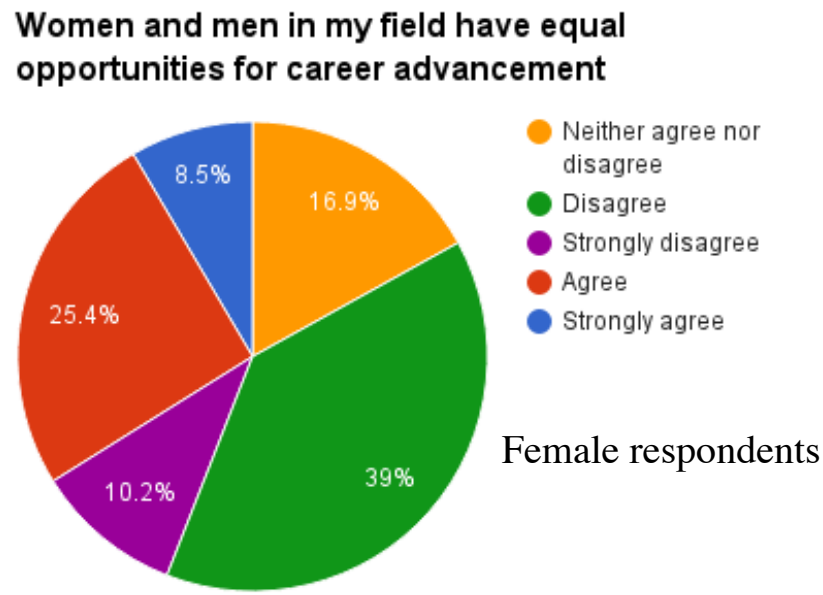
Desired outcome

To have an environment which is welcoming, accessible, positive, supportive, comfortable and where everybody has the same opportunities!

Surveys provided very interesting input:



Male respondents



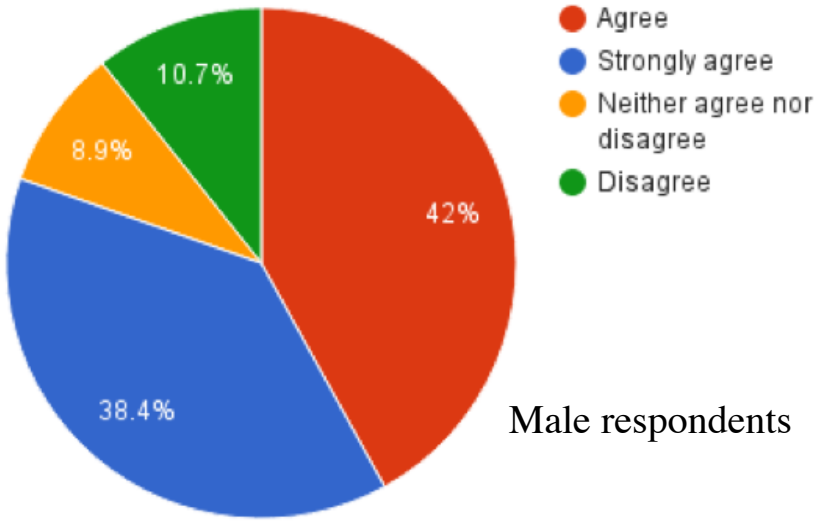
Female respondents

Male: 58.1% agree
31.3% disagree

Female: 33.9% agree
49.2% disagree

Many respondents argue that although on paper both genders are treated equally, conscious and unconscious biases, pregnancy and childbirth, and different expectations from society about caring roles are main sources of differences. Some men perceive better opportunities for women because of specific policies to promote them

In my department, staff are treated equally regardless of gender



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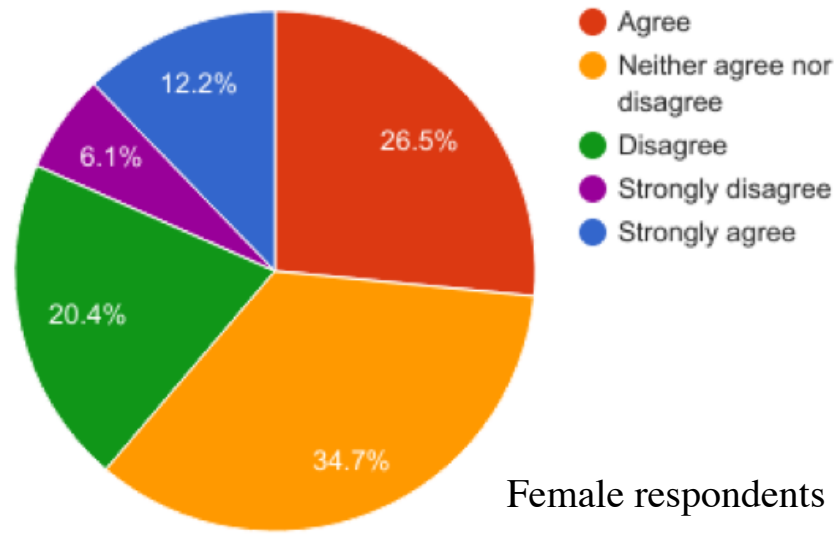
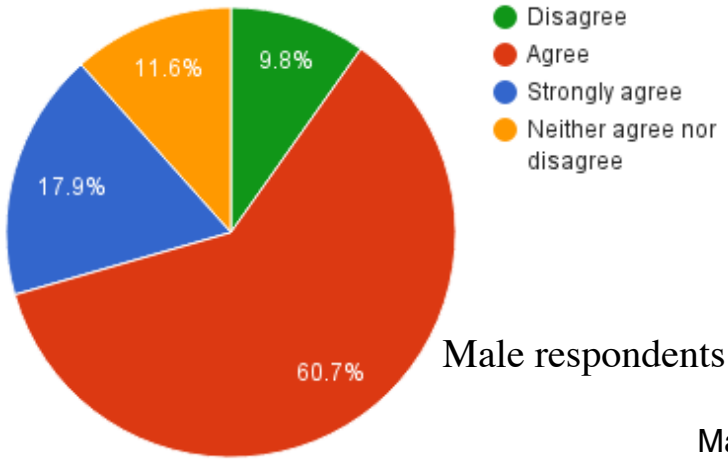


Female respondents

Male: 80.4% agree
10.7% disagree

Female: 38.7% agree
26.5% disagree

Women in my field with young families or caring responsibilities are disadvantaged in their career



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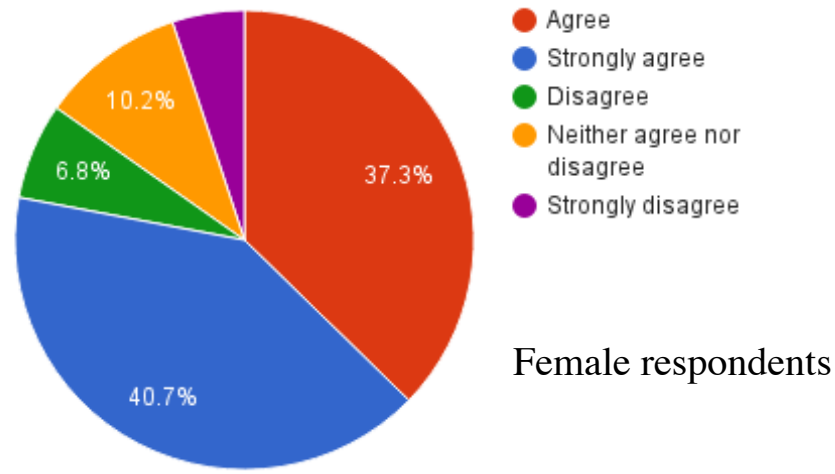
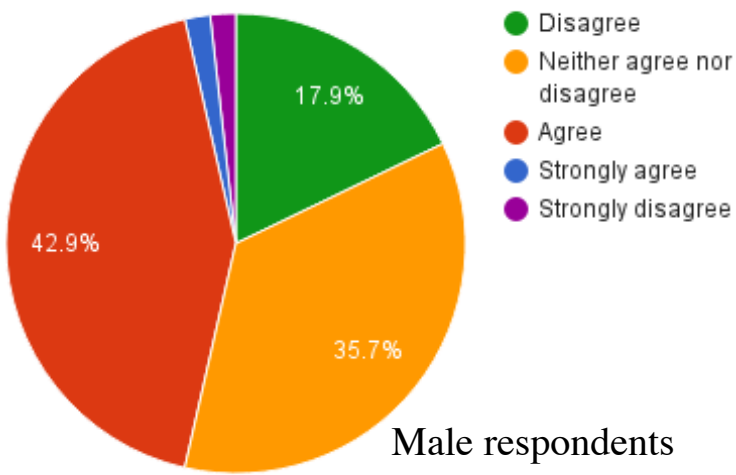


Female respondents

Male: 78.6% agree
9.8% disagree

Female: 78% agree
11.8% disagree

Men in my field with young families or caring responsibilities are disadvantaged in their career



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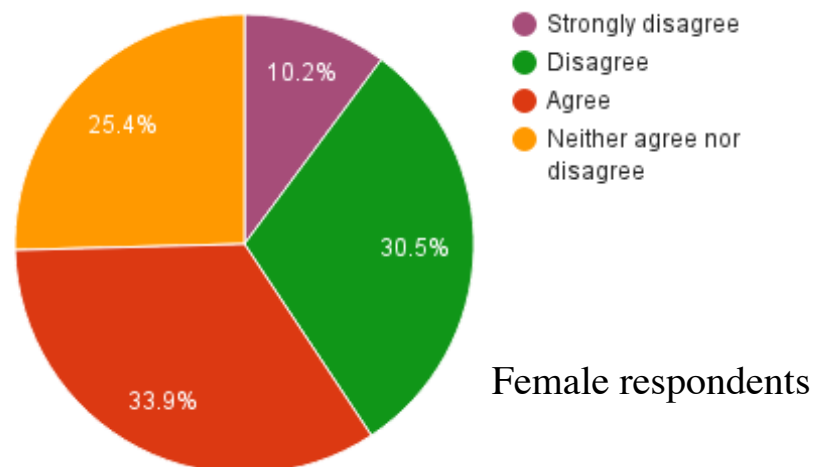

Female respondents

Male: 44.7% agree
19.7% disagree

Female: 33.9% agree
40.7 % disagree