

**1st workshop on high energy theory and gender
September 26-28 2018**

Discussion sessions

The planned themes of the discussion sessions are given below. We will break into groups during these sessions to discuss the highlighted questions; you may like to think about these in advance of the sessions.

Discussion 1: Getting more women into high energy theory

The focus of this discussion will be on how to increase the number of women coming into high energy theory at PhD/postdoc level.

There are quite large variations between countries in the number of women studying physics in the final years of high school and at undergraduate (Bachelors) level. In countries such as the UK and Holland, students already choose between sciences, humanities and social sciences at the end of high school and the percentage of women enrolling for physics courses at universities is quite low (10-20%). In other countries the percentage of women on undergraduate (Bachelors) level physics courses is much higher e.g. in Greece it is close to 50%. However, the percentage of women going onto higher study in physics, particularly theoretical physics, typically drops back to the 10-20% level.

Question 1a: What are key factors putting women off continuing in physics, particularly theoretical physics? Think about why women don't do Masters or PhDs, and don't continue from PhD to postdocs.

Question 1b: How could the theoretical physics community encourage more women to continue with Masters, PhDs and postdocs?

Spare question: In many countries, women are put off science at quite a young age by cultural factors. In other countries rates of women studying science at university are much higher: the culture supports women getting qualifications in science. The theoretical physics community clearly cannot by itself change entire cultures. However, institutions like CERN do huge amounts of outreach work and many of us are active in outreach too. What actually works in getting more students from under-represented groups (women and other groups e.g. ethnic minorities) to study physics?

Discussion 2: Career progression: (un)conscious biases

Career progression in high energy theory is difficult for everybody: permanent positions are heavily oversubscribed. Is it harder for women and other minorities? How can we ensure that progression is as fair as possible?

Question 2a: What are key factors in getting long term positions and large grants (such as ERC)? What disadvantages could women and other minorities face? What role could (un)conscious biases play?

Question 2b: What can the theoretical physics community do to ensure that hiring is as fair as possible? Should we take actions to improve diversity of speakers at conferences, journal editorial boards, advisory panels?

Spare question: Quotas are clearly controversial. Would targets, rather than quotas, be less controversial? Is it reasonable to put targets e.g. 10% of plenary speakers in conferences should be female?

Discussion 3: Changing culture in departments and institutes

The second discussion concerns actions that the high energy theory community could take as a whole. The final discussion is about how to improve cultures and environments in our own departments.

Question 3a: Do you feel your department is a good place for everybody to work? Do women and other minorities experience any recurrent issues or problems?

Question 3b: How could your department become more inclusive and welcoming for both women and other minority groups? (Note that Jess Wade will be talking about gender initiatives in UK Physics departments before this discussion session.)

Spare question. The UK and other countries have systems whereby departments can obtain accreditation for their actions to address gender equality. In UK medicine departments such accreditation is required to apply for medical council research grants. In many other countries plans for improving female participation are required in large programme grants. Should improving diversity be linked to research funding in such ways?