

On the status of women in physics in Norway – statistics and some open questions

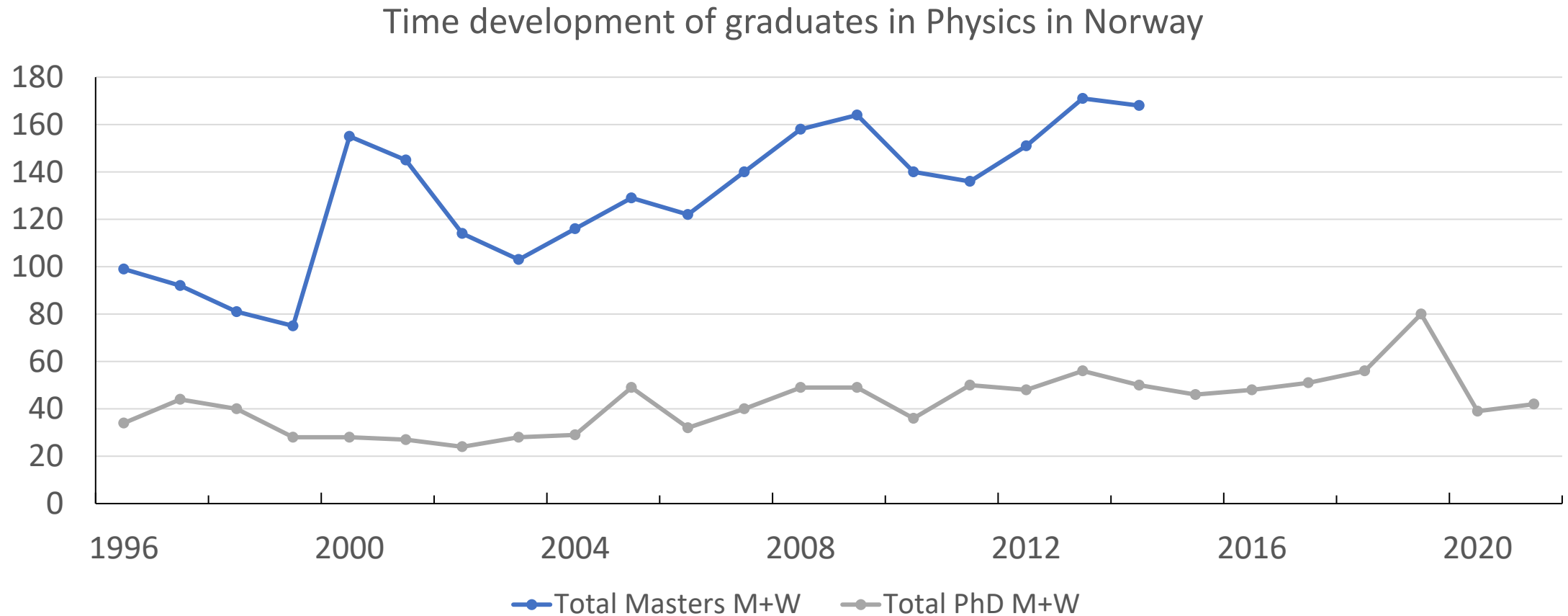
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*with thanks to Physics Departments providing
some updated numbers women faculty.*

On the statistics:

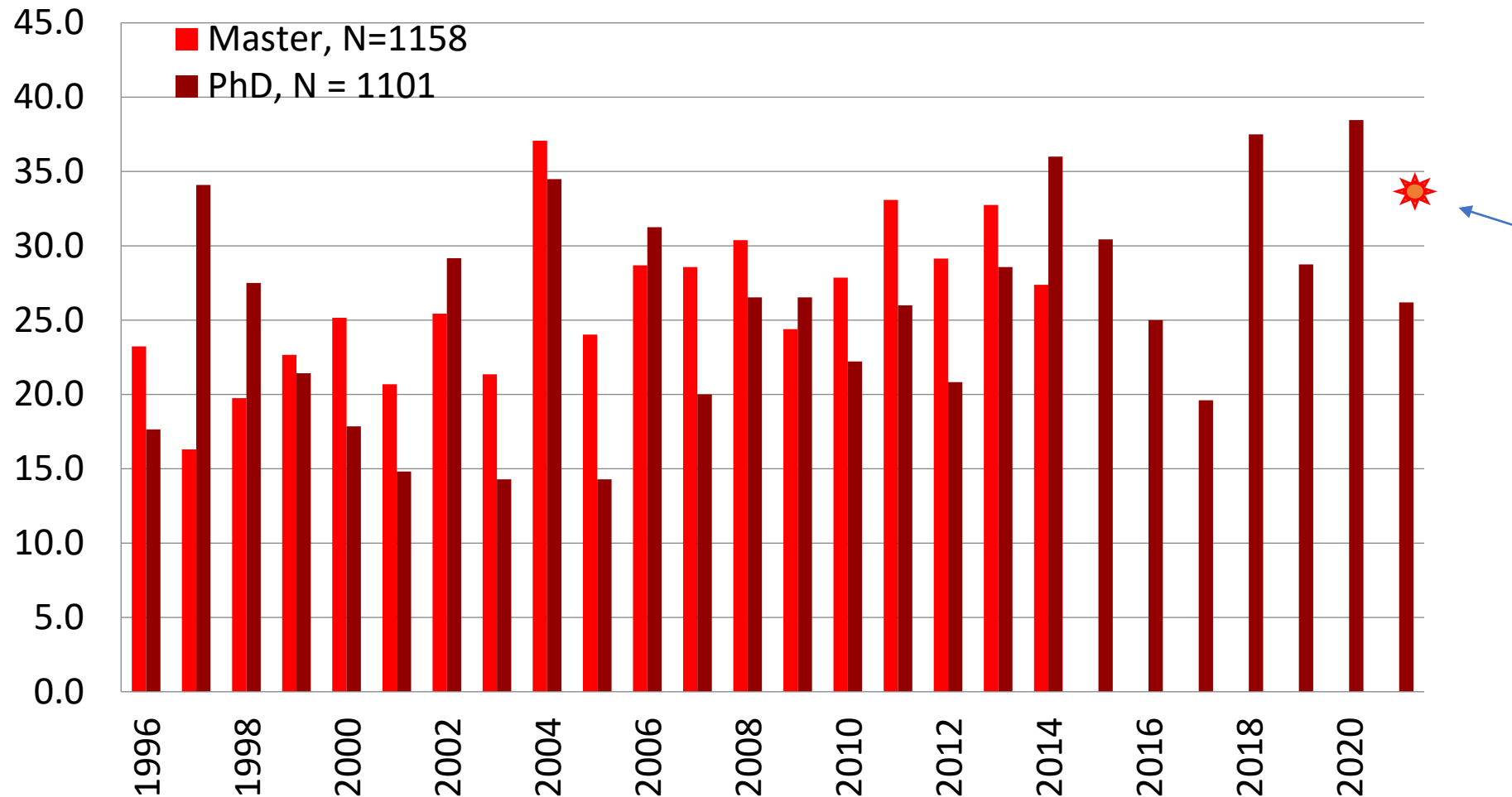
- Only Universities with specific Physics Department and master program in physics included.
- Dep. of Theoretical Astrophysics is included in statistics on faculty and postdoc numbers.
- Not all years are included.
- Database for statistics on Higher Education in Norway (DBH) no longer provides accurate numbers on masters candidates, instead numbers are rounded off to nearest 0 or 5 → large errors for small numbers. Claimed to protect individuals from being identified (although a Master examination is in fact public!)

Phd candidates increased until Corona struck.
Statistics on Master candidates too inaccurate to follow.



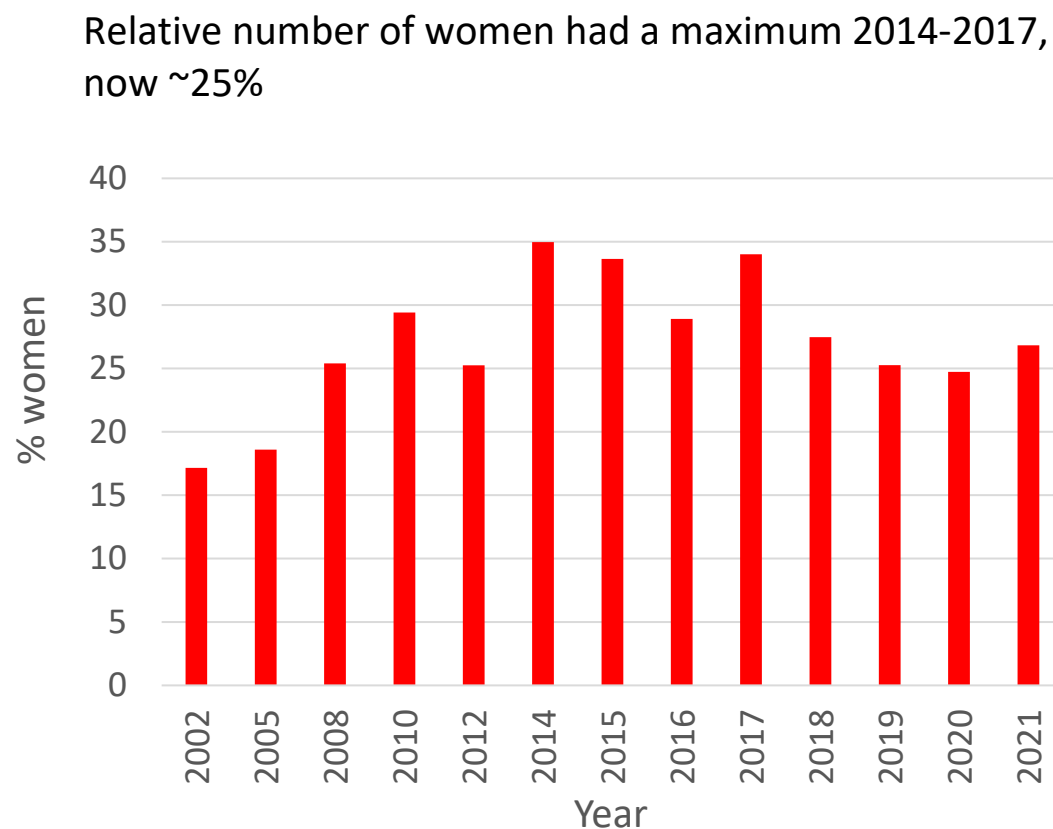
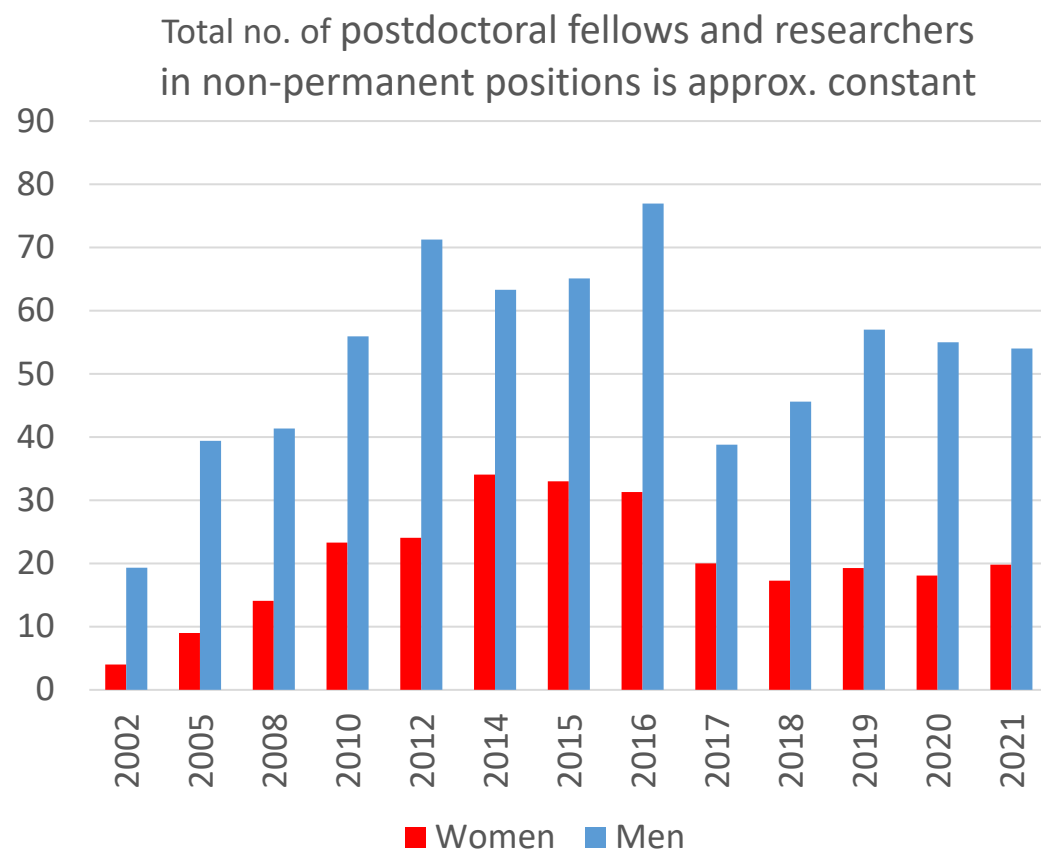
Large variation, but stable average of ~ 20% female PhDs last 10-15 years.

Percentage female candidates, Masters and PhD candidates

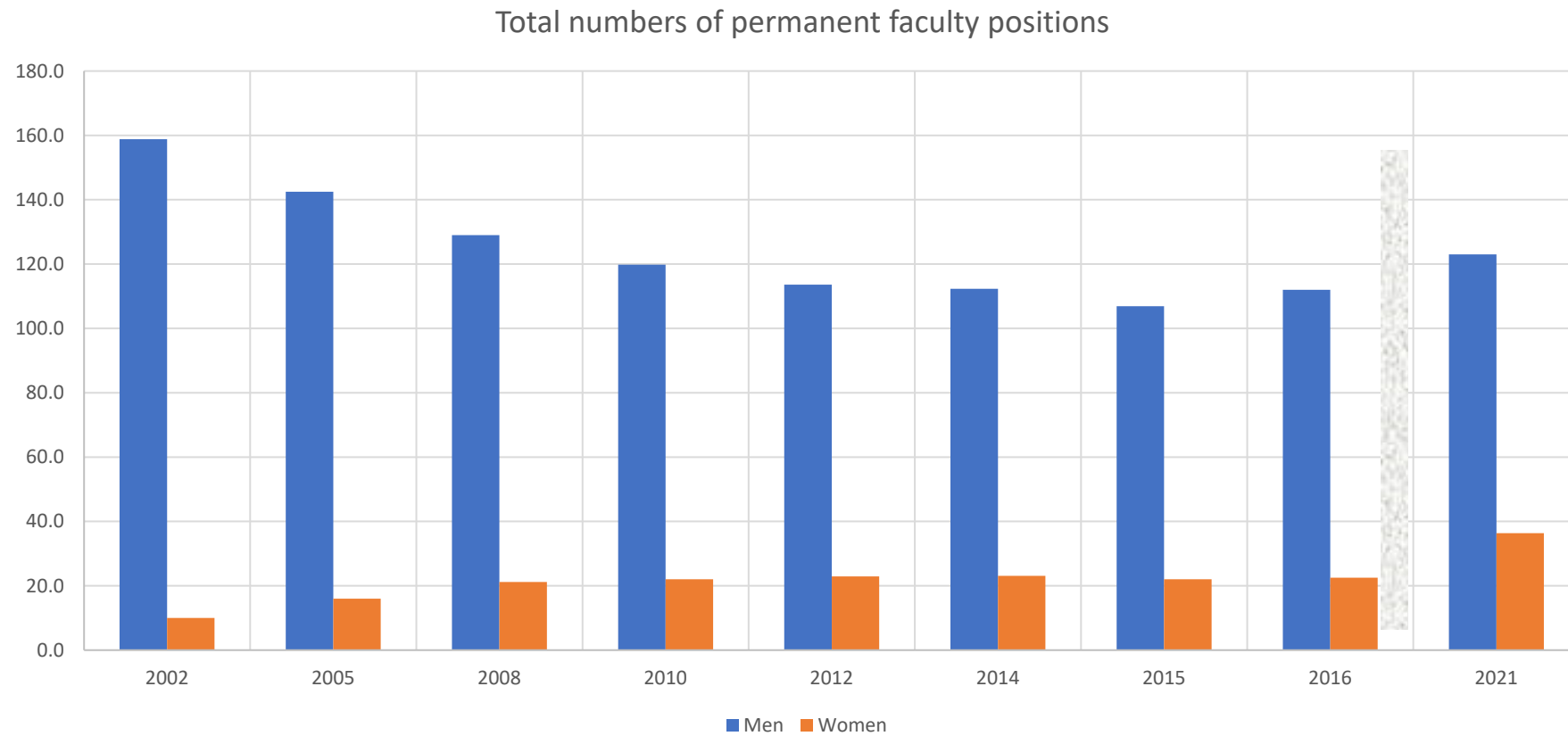


2021:
Students enrolled in
Master programs
@ Physics Deps:
Total: 1230
Men: 815
Women: 415
→ 34 % women

Women in postdoc positions has stabilized at ~25%



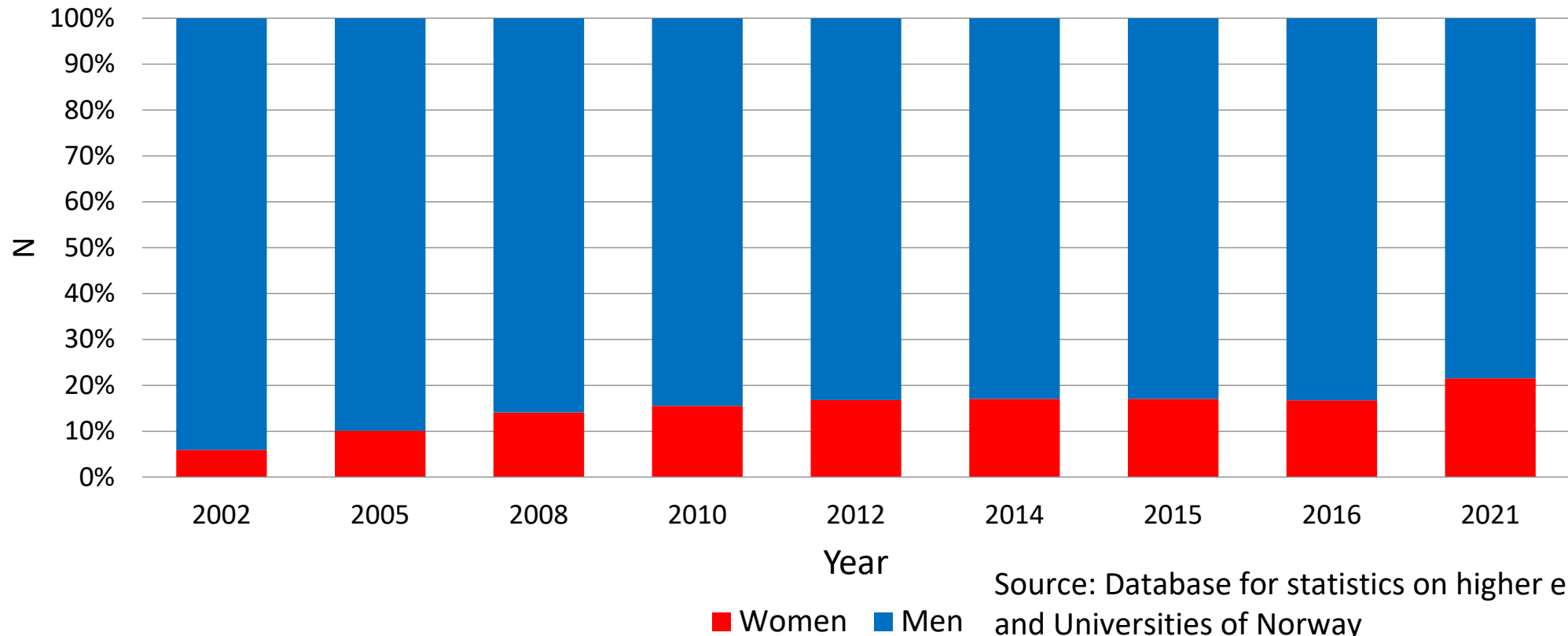
Total and women faculty has increased last 5 years - in total numbers



Women faculty has increased last 5 years - and in ratio

No. of faculties in permanent positions in physics departments
in Norwegian universities, including Astrophysics

Paid by universities base fundings



Some open questions

- **What is defined as physics?**

- Physics education is now organized in 'study programs', and very few students follow 3 yr physics bachelor + 2 yr physics master.
- Defining a physics program as a program administrated by a Physics Dep. also includes programs with minor physics component.

- **How may (or may not) internationalization influence the gender composition?**

- Very few international master students.
- Could be expected to affect PhD candidates? Presently no sign of this in the number ratio of female PhD candidates.

- **Increasing the pressure on young researchers to fund themselves in a largely project based positions → gender bias – or more general escape from research by both genders?**

Long-standing demand to increase number of permanent positions, or decrease the number of non-permanent positions

- 2-3 consecutive postdoc positions not uncommon among young physicists. Low wages. (Even my hairdresser was not impressed.)
 - > Problems planning family and settle down.
 - > some of the best people find better offers elsewhere.
- Recently proposed by government that only one postdoc position should be held in Norway. (... a tiny step...)

How permanent is a permanent position in the Universities nowadays?

Traditionally, professors were not possible to lay off, unless they did unlawful acts, like drinking at work or similar

A professor used to be a public officer (embetsmann), appointed by government

Now, they are 'hired by the state', (appointed by the University) and less protected against lay-offs.

Reasons for lay-offs can be caused by 'virksomhetens forhold'. E.g. the particular project is no longer funded or Departments closed down. Universities are now hiring 'in permanent position' and then lay off the person when project funding runs out.

Conclusions

- Ratio of master and PhD candidates seems stable over the last 5 years, or very weak increase
- Ratio of female postdocs has been stable in this period
- Female faculty has increased weakly in numbers as well as ratio to ~25 %
- More challenging to obtain good statistics, due to study programs, also interdisciplinary, more categories of positions, and other policies
- Permanent positions are not as permanent as it appear in statistics.