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## Women in Physics

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Why do so few women work in physics?

This presentation highlights some general aspects of gender disparity in natural sciences, in particular in physics. Starting at school age, most children associate a male when asked to draw a scientist. In high school, fewer girls select math as a primary subject than boys. Starting university, only 1/3 of the girls who had math as primary subject select a subject in natural or technical sciences, compared to 70% of the boys. Female physicists often don't marry, or marry a male physicist (54.6%), while only 9% of male physicists are married to a female scientist. Only one of more than 3000 female physicists asked is married to a man who stays at home and takes care for house and children, while the respective percentage for men is 25%. When changing their carer goal away from academia, 35% of the married women with children state 'children' as reason, compared to 15% of the men; for married couples without children the respective numbers are 10% and 8%, respectively, and for unmarried singles without children the numbers are 5% and 0%, respectively.

During their scientific carer, women and men display different courses and face different challenges. Women and men publish the same number of scientific papers, but women are more productive at a later stage, while men publish more in young years. When evaluated, women are systematically ranged lower than men, both in personal job interviews and in their scientific publications.

Some conclusions are drawn from the presented facts.

To increase the number of female scientists with children the work infrastructure has to be adjusted (flexible working hours, availability of part time jobs with carer opportunity, no important meetings at 16:30, etc.). Additionally, the Scandinavian example

shows that improved child care and care for older people increases the ability for women to combine carer and children.

To improve the evaluation of female scientists, social networking is an important strategy. It is shown in the talk that the evaluation of a female scientist in a job interview is evaluated as a male scientist, if one of the interviewers knows her. Additionally, using social contacts to get an interview is necessary.