

Gender Equity in the Brazilian Physics Community at the Present Time

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Abstract. We present an overview of the advances and difficulties in gender equity in the Brazilian physics community at the present time. Recognizing that in some cases the level of gender equity has remained unchanged for a decade, the Commission for Relations and Gender of the Brazilian Physical Society plans not only to continue current activities but also seek new ways to address the issue, which will be discussed at the 2nd Brazilian Conference for Women in Physics, to be organized for 2015.

Women in Brazil are underrepresented in the field of science and in particular in physics. One example of this imbalance is that at the Brazilian Academy of Science women in the field of physics and astronomy make up only 6% of participants; while among researchers at the top of their career, 5% are women. Acknowledging that this unbalanced participation of women in science leads to a less democratic and diverse environment for the development of scientific activities, recently the government and scientific societies have begun new programs to improve this situation. Many of these initiatives have been proposed after a seminal step by the Brazilian Physical Society: the creation, in 2003, of the Commission for Relations and Gender (CRG-BPS). Recognizing the importance of such steps and that the current situation is a long way from gender equity, the CRG-BPS has been carrying out a number of new activities, based on the following two general principles: (a) women are underrepresented in physics and (b) this fact reflects an androgenic behavior founded on social structures. These principles have led CRG-BPS to three courses of action [1, 2]: political, scientific, and social analysis.

To support political and social analysis, we collected data about women in physics from Brazilian government agencies and from the Brazilian Physical Society. We have, preliminarily, analyzed some of these data from a qualitative and quantitative methodological perspective, and some results are presented in the following discussion. In terms of scientific actions, the CRG-SBF considers that its work must focus on supporting qualification of women in the area of physics. In this area, the Commission made efforts to provide support for women taking into account aspects specific to women. For instance, because of CRG-BPS activities, the National Council for Scientific and Technological Development (CNPq) now allows the research fellowship period of a woman researcher to be extended for one more year in the case of pregnancy.

For the social analysis, and for the political and scientific aspects together, we have proposed and organized the Brazilian Conference for Women in Physics. The first conference was held in Rio de Janeiro on a weekend in August 2013, with participation of 75 women (professors and students) and representatives of government agencies (CNPq, Coordination for the Improvement of Higher Education [CAPES]). Regarding the data we have collected about women in physics, a preliminary analysis shows an astonishing situation [3–8]: in the highest level of qualification in physics, a great discrepancy in gender in favor of men has persisted for at least one decade, without any

tendency for change. Figure 1 illustrates the percentage of female physicists with fellowships from the Brazilian granting agencies at all levels of the academic career. This figure shows that as academic progress is made, the percentage of women decreases. In Fig. 2 the percentage of male and female researchers are shown for a period of 10 years, illustrating that the low percentage of female professionals has not changed over this time.

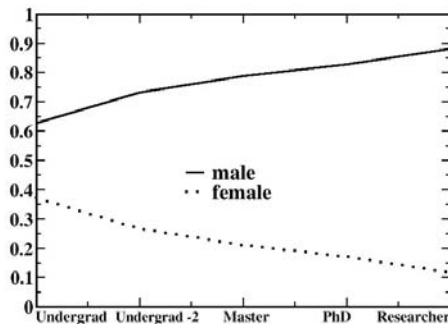


FIGURE 1. Percentage of male (solid) and female (dotted) at each academic level in 2012 (source: CNPq) [9, 10].

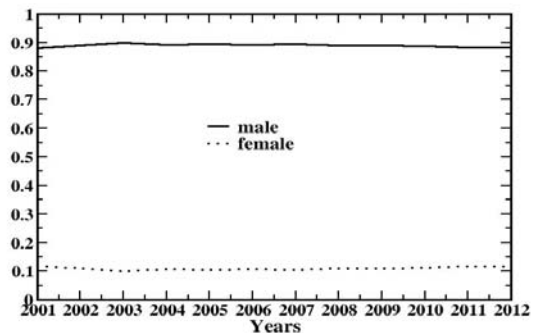


FIGURE 2. Percentage of male (solid) and female (dotted) researchers over the years (source: CNPq) [9, 10].

In short, despite all the advances and work carried out by the CRG-BPS, the situation of gender inequity in physics is far from a desirable level, and in some cases, it has been unchanged for more than a decade [3, 4]. These results have pushed the discussion inside the CRG in two directions: (a) continuing activities currently in progress and (b) analyzing the creation of new ways for addressing the problem of gender equity and the participation of women in science. These aspects will be discussed and matured in the 2nd Brazilian Conference for Women in Physics that the CRG-SBF is organizing for 2015.

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