## Waterloo Charter for Gender Inclusion and Diversity in Physics

We hold as our guiding principles that:

- People of all genders are equally good in doing excellent science and deserve equal opportunity.
- Diversity contributes to excellence in science so that the full participation of people of all genders will enhance excellence in the field of physics.
- Both thought and action are necessary to ensure equal participation for all.
- The attainment of equal opportunity should be measured by outcomes. Thus, as long as the percentage of women in the next level of advancement does not equal the percentage in the pool, equal opportunity cannot be considered to exist.
- Long-term change requires periodic evaluation of progress and consequent action to address areas where improvement is necessary.

Physics has a long and honorable tradition of participation by women who have made significant and highly creative contributions to the field. However, the percentage of female physicists remains low. It is increasingly clear that scientific careers are strongly affected by social and cultural factors, and are not determined solely by merit. The search for excellence that unites all scientists can be maintained and enhanced by increasing the diversity of its practitioners. Great discoveries thrive on cross-cultural diversity. The attainment of such diversity needs revised criteria for judging excellence, free of cultural perceptions of talent and promise.

Current available data on the relative numbers and career histories of women and men in science reveals widespread discrimination: access to the profession, like graduate education, hiring, promotion, and funding, is not always independent of gender. Discrimination can be subtle or unintentional and yet creates a non-conducive atmosphere that not only discourages and distresses women but also alienates them from the field. Such discrimination can only damage the profession. Current recruitment, training, evaluation and award systems often prevent the equal participation of women. Formal and informal mechanisms that are effectively discriminatory are unlikely to change without intervention.

The IUPAP has long assumed the responsibility of implementing strategies within its own organization to improve the situation and increase the number of women physicists. The IUPAP is not only committed to introduce changes in its own structure but also to encourage the adoption of policies by institutions, scientific societies, funding agencies and other key players of the scientific endeavor that may enable women to succeed within the existing structures of physics and allow the desired acceptance of diversity to develop fully. To achieve these goals, a set of policies, action and recommendations pertaining to affirmative action, career paths and institutional policies are spelled out in the <a href="Supporting Information">Supporting Information</a>. The IUPAP is committed to continuously update and disseminate this list. The IUPAP strongly advises the Physical Societies of its member countries to abide by the principles of this Charter and to encourage the adoption of the recommended policies adapting them to the particularities of their own countries.