

## **International Summer School Diversity in the Cultures of Physics**

Dr. Martina Erlemann  
Prof. Dr. Stephanie Reich  
Prof. Dr. Barbara Sandow  
Prof. Dr. Elvira Scheich

Department of Physics  
Freie Universität Berlin  
Arnimallee 14  
Phone: +49-30-838-75438

E-Mail: [elvira.scheich@fu-berlin.de](mailto:elvira.scheich@fu-berlin.de)

### **Objectives**

The goal of this proposal is to establish a series of summer schools on a regular, annual basis beginning with a pilot project in 2012. Each summer school will take place as a bilateral exchange with one cooperating university, beginning with the University of Uppsala in Sweden.

The purpose of the summer school series is to offer insights for students into the heterogeneity of physical research fields wherein women are active researchers. Thus the women physicists can come into view as a variety of role models for the participants of the summer school. Furthermore the summer school will allow to understand science in its cultural, political and every-day contexts. In addition, the participating physics students will be informed about the implementation of equal opportunity measures in the European and international research areas.

The establishing a summer school series will be a structural intervention in order to promote young female scientists in the transition phase from the Master to PhD studies. It is designed to support the decision of a research field for the PhD thesis, which fosters the professional career of the young women and lays the ground for an international orientation within the chosen research field.

Above all, the summer school will introduce the international participants to the on-going activities in attractive and prominent centres for scientific research. Through their stay at the Freie Universität Berlin, they will get into contact with the broad scope of physical research institutions in Berlin.

At the same time, sustainable co-operations for educating young female scientists will be built up successively during the summer school activities. The department of physics at the Freie Universität Berlin acts as one of the nodal points within these co-operative network and through the successive change of partner universities seeks to develop a European / international network.

## Target Group and Synergy Effects

The summer school project combines measures for gender equality with the promotion of young scientists and international networking. It will support the new generation female scientists in physics in three ways: (1) with the choice of field of study for their doctorate in physics as the basis for their further career, (2) with the establishment of international contacts and collaborations as well as with preparation for stays abroad and (3) with the introduction to the professional networks of women physicists and the access to national and international advancement programs.

The summer school will be addressed to students from the final period of the masters programme to initial phase of the PhD. In this section of their education the students have to make significant decisions for their further qualification and the course of their following professional occupations. However, these commitments are rarely made in the context of a deliberate career management. Here, for women scientists particularly exist very different challenges in the specialised work areas and distinct work place cultures regarding their opportunities of advancement and their chances to continue a professional life. These gender aspects should be realized and taken into consideration for the life- and career management. The summer school supports this aim through the experience of alternative approaches in a diversity of scientific settings.

The schedule of the summer school therefore offers introductions to special working fields in physics, to measures for gender mainstreaming at universities and research institutions, and to international networking. In particular, the activities are designed to reach the following aims:

- gain an insight into the variety of the research fields of the women physicists in Europe,
- lay the grounds for future collaborations and stays abroad during the graduation period,
- learn about the advancement programs for female scientists within the national and international frameworks,
- get access to the professional networks of physicists,
- know about equality politics at European universities and research institutions,
- discern work place cultures of physics in the cultural, political and life-worldly context.

Besides the planned excursions and lectures, a key component of the summer school will be the direct contact between the peer group members of the participating students. On the one hand this will facilitate their understanding of the professional and work place cultures of physics in their respective context, on the other hand this will extend and stabilize the international networks of women scientists on this stage of professional qualification.

## **Design, Implementation and Schedule of the Summer School**

Central to the outline for the summer school Diversity in the Cultures of Physics is the exchange of places with two weeks at the Freie Universität Berlin and two weeks at the partner university. In each case the courses offered will include the following events:

- Lectures and visits in the Physics Department of the FU and the partner university,
- Visits to other research institutions and universities in the region,
- Contacts to equality-oriented institutions and activities at the universities and cooperating institutions as well as in the national associations and foundations,
- Lectures and discussions on interdisciplinary gender studies.

A pilot project of the summer school in 2012 will be funded by the Freie Universität Berlin. These funds cover the stipends for the participants and the travel costs for the organizers both from Germany and from abroad. In addition, they allow to prepare the grant applications for the future years. Several institutions for such a proposal exist in Germany.

The preferable size of the bi-national group of students is 16-20 participants. A preparatory information workshop should be organized in each country during spring.

The proposed dates for the summer school in 2012 are August, 6-31. In Berlin professors and docents from the department of physics at the Freie Universität Berlin as well as guest lecturers from the other universities and research institutions will concur to the summer school. Visits to the labs and work places of the contributing physicists will be complemented by the opportunity to talk to equal rights officers, gender studies scholars, representatives of funding institutions and the German Physical Society.

The results and reports will be presented via a web-presentation.