AKC 1: AKC

Time: Tuesday 10:30–12:30 Location: ZEU 250

Invited Talk AKC 1.1 Tue 10:30 ZEU 250

The tragic destiny of Mileva Marić Einstein — •Pauline Gagnon — CERN, Geneva

What were Albert Einstein's first wife*s contributions to his extraordinary productivity in the first years of his career? A first biography of Mileva Marić Einstein was published in Serbian in 1969 but remained largely unknown despite being translated first in German, then in French in the 1990*s. The publication of Mileva and Albert*s love letters in 1987 revealed how they lived together while two recent publications shed more light on Mileva Marić*s life and work. I will review this evidence in its social and historical context to give a better idea of her contributions. In this presentation, I avoid all type of speculation and do not attack Albert Einstein personally, but rather strictly stick to facts. The audience will be able to appreciate why such a talented physicist has been so unkindly treated by history.

Invited Talk AKC 1.2 Tue 11:30 ZEU 250

Physik-Projekt-Tage – Ein Workshop für Schülerinnen der Oberstufe — Anna Albrecht[2], •Anna Benecke[1], Dietmar Block[3], Franko Greiner[3], Andreas Hinzmann[2] und Roman Kogler[4] — [1]Université catholique de Louvain, CP3 — [2]Universität Hamburg, Inst. f. Exp. Physik — [3]CAU Kiel, Sektion Ohysik, IEAP — [4]DESY, CMS, Hamburg

Gleichstellungsarbeit ist gerade auch in der Physik ein wichtiges Thema. Dies zeigen nicht zuletzt die Einschreibezahlen von Studentinnen in den Physikstudiengängen. In Kiel z.B. liegt der Prozentsatz von der Frauen hier bei etwa 15%. Die Gleichstellungsarbeit erst an der Universität zu beginnen genügt daher nicht. Statt dessen müssen bereits die Schulen einbezogen werden. Mit den Physik-Projekt-Tagen (PPT) wurde ein viertägiger Workshop nur für Schülerinnen ins Leben gerufen. Die Teilnehmerinnen haben die Möglichkeit, zu Schuljahresbeginn vier Tage lang in einem Projekt ihrer Wahl zu experimentieren, ihr Interesse an Physik zu steigern und Netzwerke über Schulgrenzen hinweg aufzubauen. *Die Projekte umspannen verschiedene Forschungsfelder der Physik und reichen von Teilchenphysik, über Laserphysik und Plasmaphysik bis hin zu Nanowissenschaften. Zur Qualitätssicherung und Weiterentwicklung dieser Veranstaltung werden die PPT von einer kritischen Evaluation begleitet. Das Konzept der PPT, Inhalte und ausgesuchte Ergebnisse der Evaluation werden vorgestellt. Seit 2015 ist das Projekt im Instrumentenkasten für Gleichstellungsarbeit der DFG.

Invited Talk AKC 1.3 Tue 12:00 ZEU 250

Belonging – a key to success in STEM?! — Lennart Brademann, Denise Dörfel, •Barbara M. Gordalla, and Anika Ihmels — TU Dresden, Faculty of Psychology, WOP

Women continue to be underrepresented in science, technology, engineering or mathematics (STEM) fields as students and also in professional roles. What factors influence women's choice, persistence, and success? In the US, studies evidenced that women do not feel like they belong in STEM community: they experience an impeding study climate (also called *chilly climate*) or suffer from stereotypical views on possible careers. This results in a decreased desire to choose a STEM carrier (for an overview see Shapiro & Sax, 2011). The probability to drop out of the program (Höhne & Zander, 2019b; Peters et al., 2015) is increased in the case of high *belonging uncertainty*, or when there is a conflict between an occupational stereotype and one's self-description.

The talk presents results from an online survey conducted among students, focusing on the field of physics. 122 physics students (40% female) completed it regarding success in studying physics (GPA, number of last attempts for an exam), turnover intention, chilly climate (e.g. exclusion, hostility), expectation of success (e.g. perceived potential, sense of belonging (e.g. belonging uncertainty), identification with physics, enjoyment, interest, a list of adjectives to describe oneself and to describe a *successful physicist*, and sociodemographic variables.

Results revealed lower social belonging and higher belonging uncertainty as well as a worse stereotype fit for women as compared to non-female students. Espepcially, social belonging turned out to be the most important predictor for GPA, identification, turnover intention, interest, enjoyment, perceived potential and self-efficacy. Social belonging hence was identified as an important influencing factor to enhance women's interest, persistence, and success in STEM. Therefore, this factor demands for more attention in the future, both in research and in actual working environments - for a continued success of Germany in STEM fields.