

BERNOULLIS TAFELRUNDE

GRADUATE STUDENT SEMINAR

17 October 12:15-13:00

Seminarraum 05.002, Spiegelgasse 5

CHRISTIANE SCHERB

Johannes Gutenberg University Mainz

Two Puzzles in Particle Physics

ABSTRACT

The Standard Model of Particle Physics is a gauge field theory, describing our current understanding of elementary particles. It is based on a symmetry group, which governs the properties and interactions of particles. Even though most observations are in good agreement with the predictions, there are some missing pieces, like neutrino masses and dark matter. Particle physicist are searching for extensions of the Standard Model to solve those questions. Two models to solve them are introduced and their perspective discussed.