

MP 4: Plenarvortrag I

Zeit: Dienstag 11:00–11:45

Raum: 30.95: 001

Plenarvortrag MP 4.1 Di 11:00 30.95: 001
Flavour Physics in the LHC Era — ●ANDRZEJ BURAS — Physik
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After a brief summary of the structure of the Standard Model of particle physics I will concentrate the presentation on the flavour and CP-violating interactions in this model and in the extensions of this model, that is in the so-called New Physics models. New Physics is required to solve a number of problems present in the Standard Model, in particular those related to the electroweak symmetry breaking and

the hierarchies of quark and lepton masses and their flavour violating interactions. The violation of CP-symmetry and rare K and B decays as well as lepton flavour violation will play important roles in this talk. This decade should make a significant progress towards the Theory of Flavour and the main goal of this talk is to transfer this belief not only to my colleagues in the particle physics community but to the remaining members of the audience. Identification of particular patterns of flavour violation in the future data and the correlations between various observables, also those measured by the Large Hadron Collider at CERN, could help us to identify New Physics at very short distance scales and lead to a New Standard Model.