

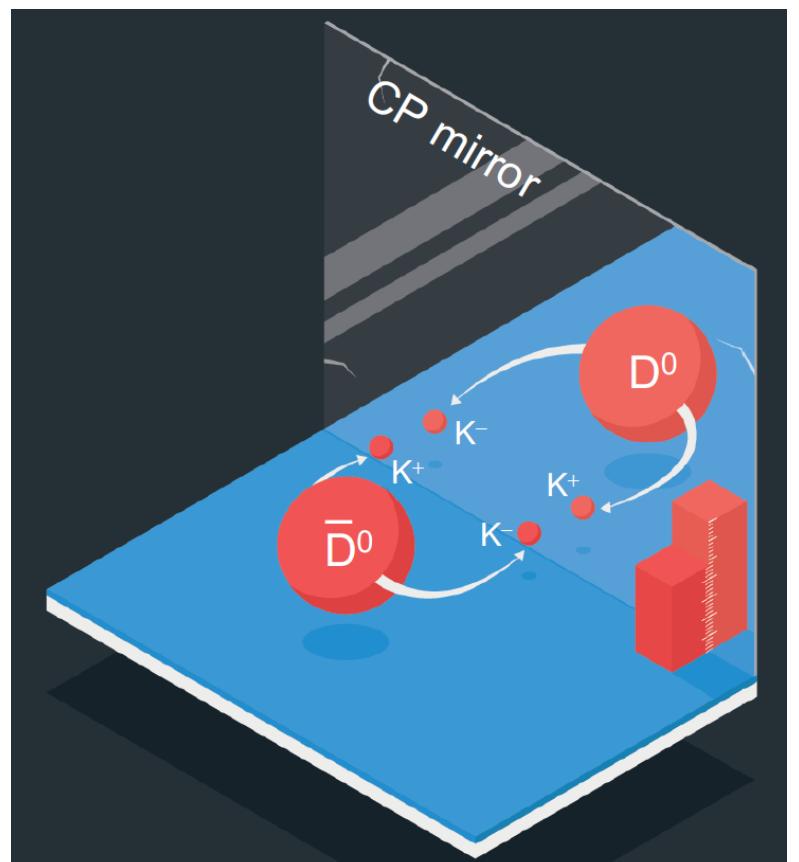


Ripples in Flavour Space – Unlocking Nature’s Secrets with Antimatter.

Tuesday, 02 July 2019, DESY Auditorium, 16:45 h

Marco Gersabeck (University of Manchester)

This talk will review the vast potential of quark flavour physics with the example of charm physics. Charm physics started in the early 1970s and has seen an increased focus on mixing and asymmetries (CP violation) of its matter and antimatter states in the past decade, following the first observation of mixing in a combination of BaBar and Belle measurements in 2007, and culminated in this year’s discovery of CP violation. Neutral charm mesons (quark-antiquark states) are unique as they are the only up-type mesons undergoing oscillations. This talk will review the history of the field and present highlights of recent measurements of charm physics and related parts of flavour physics. It will conclude with prospects for measurements at the future flavour factories Belle II and the LHCb upgrades, commenting also on theoretical challenges.



- **Coffee, tea and cookies will be served at 16:30h**
- **After the colloquium there is a chance for private discussions with the speaker over drinks and pretzels**