SPEAKER: Quentin Bonnefoy

TITLE: **CP-odd flavour invariants in the SMEFT**

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PLACE: P4C - Edificio Paolotti

ABSTRACT

Flavour invariants combine lagrangian parameters into physical, basis-independent quantities. They are particularly useful to discuss CP violation (CPV), as they encode collective effects and allow to build genuine order parameters of CPV. In this talk, I will discuss CP-odd invariants in the Standard Model Effective Field Theory (SMEFT). I will emphasize their interplay with the SMEFT power counting and will present complete sets of invariants at leading order. The latter allow to parametrize new sources of CPV beyond the SM independently of IR field bases, and offer alternative parametrizations of the SMEFT parameter space.

Organized by

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