Contribution ID: 20 Type: not specified

## Indirect constraints on top quark operators from a global SMEFT analysis

Wednesday 12 June 2024 17:25 (10 minutes)

In this talk I will focus on a model independent analysis of top-philic New Physics scenarios, under the assumption that only effective operators involving top quarks are generated at tree level. After an introduction on the SMEFT framework, I will illustrate the procedure we used to derive indirect constraints on Wilson Coefficients, combining a large set of observables: B and K decays, meson mixing observables, precision electroweak and Higgs measurements, anomalous magnetic moments, LFV processes, LFU tests and the Cabibbo anomaly. I will show the results through one-parameter, two-parameters and global fits, pointing out the interplay and the complementarity among the observables. I will also compare our results to direct bounds provided by top quark productions at LHC.

Primary authors: STANZIONE, Alfredo; RODRIGUEZ SANCHEZ, Antonio; MARZOCCA, David (INFN

Trieste); GAROSI, Francesco

**Presenter:** STANZIONE, Alfredo **Session Classification:** Session