EF03: Heavy flavor and top quark physics

Overarching questions (a selection) and examples of tables/plots:

- How can the full exploration of the heaviest known elementary particle help elucidate the Higgs sector and inform about possible physics beyond the SM?

- What is the ultimate precision that can be reached for the measurement of a well-defined top quark mass? What is needed to reduce the theoretical uncertainties to the required level? Table: Projections for precision in m_{top} measurements

- What is the potential for discovery and impact of rare top-quark production processes? Plots: Projections for 4-top production and limits on 4-top operators, Tables: Observables used in EFT fits with projected uncertainties; Projections for FCNC

- What can be learned from measurements of top quark properties such as spin correlations, asymmetries, polarization in new kinematic regimes, and what is the achievable/required precision? Plots: spin correlation fractions and azimuthal angular correlation and sensitivity to BSM

- Can we realistically project systematic uncertainties to compare different collider options. Can we learn from the lessons of Tevatron to LHC and Snowmass 2013 to LHC? Tables: Comparing previous projections to top mass measurements

See also the draft of the outline of the TG report