

# 26th International Conference on Supersymmetry and Unification of Fundamental Interactions (SUSY2018)



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## The top-quark mass: uncertainties due to bottom fragmentation

*Wednesday 25 July 2018 15:10 (20 minutes)*

The top quark mass is a fundamental parameter of the Standard Model, entering in the precision tests even before the Higgs discovery and playing a crucial role in any assumption on the stability of the electroweak vacuum. Therefore, determining it with the highest precision and having under control all sources of errors will be of paramount importance. I will investigate the uncertainties in the top mass extraction due to bottom-quark fragmentation in top decays, in the context of both Monte Carlo generators and resummed calculations. In particular, I will discuss the interpretation of the measured mass as a pole mass and the sources of both perturbative and non-perturbative uncertainties.

### Parallel Session

Electroweak, Top and Higgs Physics

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