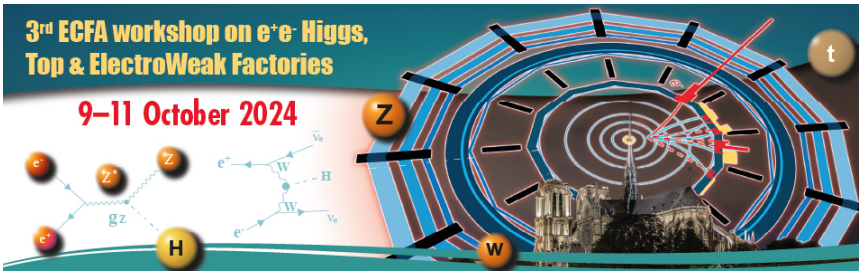

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Top properties from the threshold scan

Thursday 10 October 2024 15:55 (14 minutes)

In this contribution we report on progress in the prospects for the measurement of top quark properties in a scan of the center-of-mass energy through the top quark pair production threshold. Several aspects of the threshold scan are studied in greater detail, including in particular the experimental selection in a new study with a parameterized simulation of the IDEA detector response in the FCCee environment. Updated projections are presented for all projects of the precision that can be achieved in the top quark mass and width determination. A new approach is explored for the extraxtion of the top quark Yukawa coupling by measuring the WbWb cross section above the tt production threshold.

This study was perfomed in the framework of the focus topic "ttbar threshold" in the ECFA Higgs/top/EW factory study". .

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