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Diagnosing top-quark Forward-Backward Asymmetry

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Recent measurements on the top-quark forward-backward asymmetry (A_FB) by the two (CDF & D0) Tevatron experiments show a more than 3 sigma deviation from the Standard Model prediction from the SM expectation of 5.2 ± 0.6%. Later about 3.1sigma enhancement was established on the basis of considering top-pairs only from the large tt_bar invariant mass region. In this talk, we will discuss about the diagnostic tests performed by us for the the aforementioned observation and provide some detail on the nature of the correct BSM model that causes such a large deviation.

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