

## XXV DAE-BRNS High Energy Physics Symposium 2022



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# Probing new physics with top quarks at LHC

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The top quark is the heaviest known elementary particle. It has deep connections to the electroweak symmetry breaking mechanism owing to its large mass. It decays faster than average time required for hadronization, thus enabling direct access to bare quark properties. Top quarks often serve as the window to new physics via its direct couplings to heavy resonances predicted by theories beyond the standard model. Stringent limits on the models explaining matter-antimatter asymmetry can be determined by carefully studying the processes involving the top quark. In this talk, a summary of latest results with the top quarks at the Large Hadron Collider will be presented.

## Session

Top Quark and EW Physics

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