

APR12-2012-020090

Abstract for an Invited Paper
for the APR12 Meeting of
the American Physical Society

Results from the LHC on the top quark

MEENAKSHI NARAIN, Brown University

This presentation will report on the measurements of top quark properties performed by the ATLAS and CMS experiments using a large sample of top quarks collected during 2011 by the LHC. These measurements provide a comprehensive picture of top physics. Top-quark measurements are of central importance to the LHC physics program, in its own right and as the dominant background to many searches for exotic phenomena. The top quark is the by far the heaviest known fundamental particle. It decays before forming bound states (hadrons), thus providing a unique opportunity to study a bare quark. Deviations in its properties from standard model predictions may indicate new physics.