

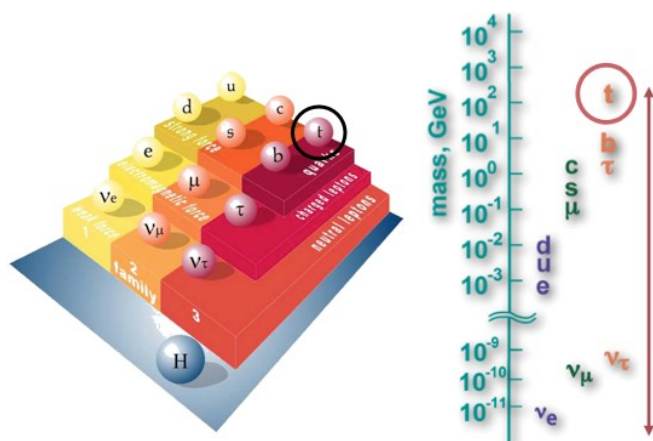
Top Quark Physics.

Lisa Shabalina (Goettingen)

Tuesday, 25 October 2011, 16:00 h

DESY Auditorium

The top quark discovered 16 years ago at the Fermi National Accelerator Laboratory by the CDF and D0 experiments is different from all other quarks: it is extremely heavy for a fundamental particle and it decays very rapidly before it can form any bound state. This feature, which is not shared by any other quark, provides a unique opportunity to study directly the decay of quarks. Also, it is thought that the large mass of the top quark is intimately connected to the mass-generating process within the SM, described via exchanges of the Higgs boson. These properties make the top quark a unique test stand for the standard model and beyond.



We present an overview of the recent measurements of the top quark production and decay properties and searches for physics beyond the standard model in the top sector at the Fermilab Tevatron proton-antiproton collider and at the proton-proton Large Hadron collider. We discuss differences and complementarity of the results obtained at both colliders.

- Coffee, tea and cookies will be served at 15:45h
- After the seminar there is a chance for private discussions with the speaker over soft drinks and pretzels

