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## Searches for New Physics with CDF Detector

*Friday 6 July 2012 15:00 (15 minutes)*

Searches for physics beyond the standard model are intensively pursued using the full CDF Run II sample. Many among them are pursued in the top-quark sector because it is believed that the top-quark, due to its very large mass, may play a special role in the spontaneous breaking of the electroweak symmetry of the standard model as well as in possible new physics. We present searches for a heavy  $Z'$  boson decaying into a top-quark pair in the semi-leptonic decay channel as well as in semi-leptonic decays associated with one and two additional jets; a search for a dark matter candidate particle associated with a single top-quark decaying into the neutrino+jets decay channel and a search of a dark matter candidate particle in events with one jet and large missing transverse energy; and a search for new physics in events with a delayed photon and large missing transverse energy.

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