

**Title:** MTop-a generator for single top production via FCNC interactions

**Author(s):** Coimbra, Rita <sup>[1]</sup>; Onofre, Antonio <sup>[2]</sup>; Santos, Rui <sup>[3,4]</sup>; Won, Miguel <sup>[1]</sup>

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**Abstract:** We present a generator for single top-quark production via flavour-changing neutral currents. The MTop event generator allows for Next-to-Leading-Order direct top production  $pp \rightarrow t$  and Leading-Order production of several other single top processes. A few packages with definite sets of dimension six operators are available. We discuss how to improve the bounds on the effective operators and how well new physics can be probed with each set of independent dimension six operators.

**Author Keywords:** Jet Cross-Sections; Changing Neutral Currents; Higher-Order Corrections; Quark Production;  $P(\bar{P})$  Collisions; Automatic-Generation; E+E Annihilation; Hadron Colliders; Event Generator; Feynman-Rules

**Reprint Address:** Coimbra, R (reprint author) - Univ Coimbra, Dept Fis, LIP, P-3004516 Coimbra, Portugal.

**E-mail Addresses:** rita.coimbra@coimbra.lip.pt; Antonio.Onofre@cern.ch; rsantos@adf.isel.pt; miguel.won@coimbra.lip.pt

**Addresses:**

[1] Univ Coimbra, Dept Fis, LIP, P-3004516 Coimbra, Portugal

[2] Univ Minho, Dept Fis, P-4710057 Braga, Portugal

[3] Inst Super Engrn Lisboa, P-1959007 Lisbon, Portugal

[4] Univ Lisbon, Ctr Fis Teor & Comp, P-1649003 Lisbon, Portugal

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