

Phenomenology 2018 Symposium



Contribution ID: 467

Type: parallel talk

Dark matter from electroweak top-quark production

Monday 7 May 2018 14:45 (15 minutes)

Assume that dark matter couples mostly to the top-quark. This hypothesis is well motivated in models with scalar mediators, where flavor-hierarchical couplings to quarks prevent large flavor-changing neutral currents. In this talk, we discuss searches for dark matter produced in association with top-quarks at the LHC. We propose single-top-associated production as a new search channel for dark matter. Being complementary to existing searches with top pairs, the new single-top channel enhances the discovery potential for dark matter in future LHC analyses.

Summary

Primary authors: PLEHN, Tilman; THOMPSON, Jennifer (ITP Heidelberg); WESTHOFF, Susanne (Heidelberg University)

Presenter: WESTHOFF, Susanne (Heidelberg University)

Session Classification: DM I