

# XXVIII International Workshop on Deep Inelastic Scattering and Related Subjects



Contribution ID: 161

Type: **Contributed Talk**

## $tZ'$ production at hadron colliders

*Wednesday, March 25, 2020 12:40 PM (20 minutes)*

We study the production of a single top quark in association with a heavy extra  $Z'$  at hadron colliders in new physics models with and without flavor-changing neutral-current(FCNC) couplings. We use QCD soft-gluon resummation and threshold expansions to calculate higher-order corrections for the total cross section and transverse-momentum distributions for  $tZ'$  production. The impact of the uncertainties due to the structure of the proton and scale dependence is also analyzed.

**Primary authors:** GUZZI, Marco (Kennesaw State University); KIDONAKIS, Nikolaos (Kennesaw State University)

**Presenter:** GUZZI, Marco (Kennesaw State University)

**Session Classification:** Electroweak Physics and Beyond the Standard Model

**Track Classification:** Electroweak Physics and Beyond the Standard Model