

Effective theory methods for heavy coloured (s)particles at hadron colliders

Perturbative corrections to pair production process of heavy coloured particles (such as top quarks or supersymmetric partners of quarks and gluons) are enhanced for small velocities of the heavy particles. This enhancement is due to emission of soft gluons and the exchange of Coulomb gluons. I will discuss the use of effective theory methods to disentangle the two effects and perform a simultaneous resummation of higher-order corrections from these two sources. Numerical results for squark-antisquark and top-antitop production at the Tevatron and the LHC will be presented.

Primary author: Dr SCHWINN, Christian (Freiburg University)

Presenter: Dr SCHWINN, Christian (Freiburg University)