Abstract

I will give an introduction to effective field theories, in particular to soft-collinear effective theory (SCET). SCET is relevant for the description of energetic particles and implements the simplifications that arise in QCD when particles become soft and collinear. It can be used to separate physics associated with different energy scales and to resum logarithmically enhanced contributions to collider processes to all orders in perturbation theory. After an introduction to the framework, I will discuss a few examples where such resummations were performed.