

Soft Gluon Evolution and Colour Reconnection

Tuesday 28 August 2018 16:52 (17 minutes)

We consider soft gluon evolution of a system of clusters forming the initial state of the cluster hadronization model, in order to constrain colour reconnection models from a perturbative point of view.

We show that this ansatz produces clusters with properties attributed to a colour pre-confined state and find strong evidence for formerly investigated colour reconnection models based on geometric properties.

We also explore the possibility of colour flows giving rise to baryonic clusters and propose a simple parametrization to incorporate the effects of soft gluon evolution in a full monte carlo event generator.

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Session Classification: Monte Carlo and resummation

Track Classification: Monte Carlo and Resummation