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Collectivity in the Lund Monte Carlo

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Collective behavior is often described in a hydrodynamic picture of a thermalized quark gluon plasma, created in collisions of heavy ions. Recent results from LHC regarding collisions in small collision systems, have raised the question to what degree existing models for multi parton interactions and hadronization can describe collectivity, if they are corrected to the dense environment of the LHC.

In this talk I will present some of the attempts to include such corrections in the Lund Monte Carlo programs Pythia8, DIPSY and Ariadne. I will describe how the Rope Hadronization model correctly predicts the rise of strange/non-strange hadrons with multiplicity, as well as how interacting Lund strings can dynamically generate a pressure, giving rise to a ridge structure. Finally I will discuss how such models developed for pp collisions, can convincingly be extrapolated to collisions of nuclei.

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