Constrained kinetics of multiparticle systems

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Abstract

We consider the dynamics governing the evolution of a many body system constrained by a nonabelian local symmetry. The condition to preserve a given representation of the symmetry group of the system leads to new constraints for the kinetic equations. This gives subsidiary correlations which influence particle multiplicities and equilibration of the system. Heavy ion collision is a particular example for such behaviour with strong interaction symmetries taken into account.

Preprint submitted to Elsevier Preprint *20 December 2000*