High energy Factorization, the Glasma, and the Ridge in A+A collisions

R. Venugopalan

We discuss a high energy factorization theorem for inclusive gluon production in A+A collisions. The produced gluons form a high occupation number state called the Glasma. We identify subleading contributions from the nuclear wavefunctions that are unstable to temporal evolution these play a role in isotropization and eventual thermalization of the Glasma. Finally, we discuss a striking phenomenon in A+A collisions, the ridge, which is likely to be formed early in the nuclear collisions. We argue that transversely flowing Glasma flux tubes reproduce many of the observed features of the ridge.