

**How Glasma evolves to Quark-Gluon Plasma:  
from turbulent attractor to perfect fluid**

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Collisions of ultra relativistic heavy nuclei at the Relativistic Heavy Ion Collider (RHIC) in the US and at the Large Hadron Collider (LHC) in Europe create ephemeral droplets of Quark-Gluon Plasma (QGP), the hottest matter on earth, with temperatures up to 5 trillion Kelvin. Experiments at RHIC and the LHC provide strong evidence that the QGP flows briefly as a nearly perfect fluid, with very little resistance to its motion. After an introduction to the QGP and its properties, we will focus on its primordial state, the Glasma--a state of highly occupied, strongly correlated gluons--and describe some of its remarkable properties. These include a turbulent attractor identical to similarly prepared cold atomic cases, and off-equilibrium topological "sphaleron" transitions that generate an anomalous Chiral Magnetic current. We shall discuss how even smaller sized systems such as high multiplicity proton-proton and proton-nucleus collisions can provide deeper insight into the thermalization of the Glasma into the Quark-Gluon Plasma.