

**Gergely Markó:** Chiral magnetic effect: from perturbation theory to lattice QCD

In this talk we summarize our results obtained for the in-equilibrium chiral magnetic current. We will give an overview of perturbative results, and what insight they yield in preparation for full QCD lattice simulations. We then come to the lattice results, stretching a broad temperature range around the chiral transition temperature. In the end we will shortly comment on how our description can be extended to obtain the out-of-equilibrium conductivity.