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## Lattice study of Chiral Magnetic Effect in QCD and Dirac semimetals.

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The Chiral Magnetic Effect (CME) is of exclusive interest since it allows probing topological properties of QCD and is a possible macroscopic manifestation of the chiral anomaly. The CME was recently observed experimentally in Dirac semimetals, but for QCD the effect has not yet been confirmed.

Within this work the CME in Dirac semimetals and QCD was studied within lattice simulation. For QCD we use stout smeared  $2 + 1$  staggered fermions at physical pion and strange quark mass and observe the rapid growth of conductivity  $\sigma_{\parallel}$  in the direction of external magnetic field  $B$ , which is in agreement with the CME predictions.

**Primary authors:** KOTOV, Andrey; Dr BRAGUTA, Victor (ITEP); Dr NIKOLAEV, Aleksandr (Swansea University); ASTRAKHANTSEV, Nikita; NEGRO, Francesco (INFN - Sezione di Pisa); D'ELIA, Massimo (University of Pisa); Prof. SANFILIPPO, Francesco (Southampton University)

**Presenter:** Dr BRAGUTA, Victor (ITEP)

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