
KMI - Theory Seminar

Thursday, Feb. 13, 2014

5:15 pm, KMI Science Symposia (ES-635)

“Relativistic matter in a magnetic field:
a new face of the chiral anomaly”

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Abstract:

Collisions between heavy nuclei at RHIC collider produce some of the strongest magnetic fields that can be generated under laboratory conditions. The recent experiments indicate the existence of C, CP, and time reversal violation effects in hot relativistic matter produced at RHIC. Theoretical works suggested that these effects are generated by a strong QCD dynamics in relativistic matter in a magnetic field. It has been recently argued that this dynamics is intimately connected with some new features of the chiral anomaly. I will describe these features and the latest results in their experimental studies.