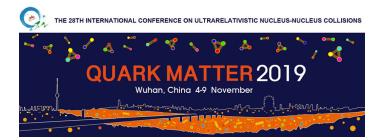
## Quark Matter 2019 - the XXVIIIth International Conference on Ultra-relativistic Nucleus-Nucleus Collisions



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## **Anomaly Effects in Transport Coefficients**

Monday 4 November 2019 17:40 (20 minutes)

Recently anomaly related transports have attracted lot of interests in various fields. Ranged from low energy physics and in condensed matter up to high energy physics and in heavy ion collisions, physicists are interested to study the effects of microscopic anomaly over the macroscopic scales. Historically this stream is initiated by the work of Vilenkin in 1979 [ A. Vilenkin, Phys. Rev. D 20, 1807 (1979)] and afterwards physicists try to study these anomalous transports in various subjects such as in weak regime by using the Chiral Kinetic Theory (CKT) or in strong regime using the ADS/CFT correspondence and fluid-gravity conjecture. Based on this motivation, I want to review our recent works in our groups which study anomaly related issues by using CKT approach and chiral hydrodynamics. To this purpose, first I want to mention about hydro modes for relativistic anomalous fluid and then introduce the notion of equilibrium frame. After that I will try to address the magneto transports in an anomalous fluid by using the linear response theory. For weakly interacting particles this study will be performed by using the CKT, while for strongly interacting matter this will be done by using the gauge/gravity duality and the notion of magnetized brane.

## Primary author: Dr TAGHINAVAZ, Farid (IPM)

**Co-authors:** Dr ABBASI, Navid (IPM); Mr TAVAKOL, Omid (Sharif University of Technology); Mr GHAZI, Armin (Sharif University of Technology); Mr NADERI, Kiarash (Sharif University of Technology)

**Presenters:** Dr TAGHINAVAZ, Farid (IPM); Dr ABBASI, Navid (IPM); Mr TAVAKOL, Omid (Sharif University of Technology)

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