

Department of Theoretical Physics



Cosmology and Astro-particle Physics Seminar

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Primordial Magnetic fields and the Gravitational waves

Tuesday, 30 April 2019, 13:00
Room A304

It is known that cosmic magnetic field, if present, can generate anisotropic stress in the plasma and hence can act as a source of gravitational waves. These cosmic magnetic fields can be generated at very high temperature, much above electroweak scale, due to the gravitational anomaly in presence of the chiral asymmetry. The chiral asymmetry leads to instability in the plasma which ultimately generate the magnetic fields. In the present talk, I will discuss the generation of gravitational waves, sourced by the magnetic field created due to the gravitational anomaly.