Cosmic Magnetism in Voids and Filaments



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Inferring primordial magnetic properties from the resulting gravitational waves (online)

Friday, 27 January 2023 10:30 (20 minutes)

Magnetic fields generated during inflation or during phase-transitions result in rather different gravitational wave signatures. In my talk, I will present results from recent high resolution numerical simulations. There are significant differences in the gravitational wave spectra from earlier analytic calculations. A particularly important feature is a sharp drop in the spectral power at frequencies above the peak value. In my talk, I will also address differences between vortical and acoustic turbulence, as well as the relation between magnetic helicity and circular polarization of the resulting gravitational waves.

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