Stochastic Background of Gravitational Waves from Cosmological Sources

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Several mechanisms exist for generating a stochastic background of gravitational waves in the period following inflation. These mechanisms are generally “classical” in nature, with the gravitational waves being produced from inhomogeneities and not quantum fluctuations. The resulting stochastic background could be accessible to the next generation of gravitational wave detectors. In this talk we’ll discuss computational techniques and approximations for computing such a background. Specifically, we’ll focus on gravitational waves generated in a simple model of pre-heating.