Riemann observables of the noncancellation of spacetime geometry fluctuations

VICTOR PARKINSON, LARRY FORD, Tufts University — A model of the noncancellation of spacetime geometry fluctuations is considered in the presence of an oscillating background metric. Quantum fluctuations originate in the stress-energy tensor and drive fluctuations in the oscillating metric, leading to a change in the correlation function of observables based on the Riemann tensor, and to a secularly growing effect. One such observable, the rate of the fractional redshift, will be presented.