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Quantum fluctuations in the stress energy of a conformally invariant scalar field in de Sitter space¹ JASON BATES, PAUL ANDERSON, Wake Forest University, H.T. CHO, Tamkang University, B.L. HU, University of Maryland — In this talk, I will present the results from a calculation of the symmetric two point correlation function for the stress-energy tensor, also known as the noise kernel, for a conformally invariant scalar field in de Sitter space. This calculation differs from previous ones in that the noise kernel is computed for an arbitrary separation of the points including null separation. Additionally, the expression is evaluated in both the spatially flat cosmological coordinates and the static coordinates for de Sitter space. In the static coordinates the behavior of the noise kernel at the cosmological horizon is investigated.

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