Squeezing of quantum noise

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1 Introduction

Noise usually arises from coupling with an unknown external object: This creates joint distribution of two objects (which in the quantum context means entanglement), and when we keep our eyes only on one of them, we need to average over the state of the other, which corrects the theory with noise and dissipation [1]. When the full quantum treatment is needed, however, another type of noise appears:

2

References

[1] Robert Zwanzig. *Nonequilibrium statistical mechanics*. Oxford university press, 2001. The discussion on Mori-Zwanzig formalism can be found on page 149.