

## Amplitude-Squared Squeezing in a Kerr-Nonlinear Blackbody

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Abstract: We find that amplitude-squared squeezing of the photon field is present in a new blackbody, namely, a Kerr-nonlinear blackbody. The squeezing effect decreases as temperature  $T$  increases. The amount of the amplitude-squared squeezing in a Kerr-nonlinear blackbody is much larger than the corresponding squeezing in normal blackbody, and the degree of amplitude-squared squeezing is much larger than the amplitude squeezing for the same range of parameters in a Kerr-nonlinear blackbody.

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Key words: Kerr-nonlinear blackbody, amplitude-squared squeezing, nonpolariton

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