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Field's entropy in the atom-field interaction: Statistical mixture of coherent states

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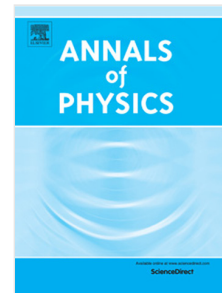
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We show that in this case it is possible to calculate analytically the field entropy for times of the order of twice the collapse time.

We show that powers of the density matrix of the field may be obtained from powers of the atomic density matrix.

Entropy operators for both subsystems are obtained even though the field is initially in a mixture of coherent states.

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