Generalized Weyl Ordering and Nonlinear Coherent States

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Abstract: In the context of the nonlinear coherent state (NLCS) theory we introduce the generalized Weyl ordering operator formulation. The corresponding generalized Wigner operator turns out to be the Weyl ordered Dirac δ-operator functions. The completeness relation of NLCS is recast into generalized Weyl ordering form. The relationship between normal ordering, antinormal ordering and the generalized Weyl ordering is established which constitute a self-consistent theory for NLCS.

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