

WICK'S SYMBOL APPROACH
TO THE FRÖHLICH POLARON PROBLEM

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S u m m a r y

Various upper bound estimates for the ground state energy of the quantized Fröhlich's model of Landau-Pekar polaron were derived by means of a variational method based on the Wick symbol formalism and the theory of coherent states. The bounds so obtained are valid for arbitrary strengths of the electron-phonon interaction. A generalization of the proposed formalism for the case of the Fröhlich polaron model in an external magnetic field is outlined as well.