

Thesis Title	Large Spin Singlet Bipolaron at Finite Temperature
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ABSTRACT

We derive expressions for the ground-state energy and the free energy at finite temperature of the large spin singlet bipolaron within the Feynman path integral formalism. We introduce an improved trial action containing both a local harmonic oscillator and non-local ones to simulate both the relative motion of the two electrons and the centre-of-mass motion. We see that by means of the Feynman variational method, we can obtain a more general result than previously reported in the literature. This is due to our improved trial action.