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## Intrinsic electron paramagnetic resonance in $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$ : Manifestation of three spin polarons

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### Abstract

Electron-Paramagnetic-Resonance (EPR) measurements on  $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$  single crystals provide experimental evidence of a three-spin polaron of two  $\text{Cu}^{2+}$  ions and one p hole. The symmetry properties and the peculiar temperature dependence of the g-value of the EPR line indicate the presence of a dynamical Jahn-Teller distortion (Q<sub>2</sub>-rnode) and formation of a collective mode of polarons and surrounding strongly correlated Cu ions (bottleneck regime). © 1999 Plenum Publishing Corporation.

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