Entangled State Reconstruction of an Electron in the Penning Trap

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We apply a tomographic method we have recently proposed to the reconstruction of the full entangled quantum state for the cyclotron and spin degrees of freedom of a trapped electron. Our numerical simulations show that the entangled state is accurately reconstructed. – Pacs: 03.65.-w, 03.65.Bz, 42.50.Vk, 42.50.Dv

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