Off-Diagonal Long-Range Order, Restricted Gauge Transformations, and Aharonov-Bohm Effect in Conductors [Phys. Rev. Lett. 76, 2207 (1996)]

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[S0031-9007(96)01060-5]

A line of text was accidently deleted immediately following Eq. (13). The correct paragraph is as follows:
The same trick can be played on the Hamiltonian H. The gauge transformation

$$\overline{H} = \overline{U} H \overline{U}^{-1} \tag{12}$$

does not exist in general because it creates a multiple-valued Hamiltonian that has no meaning, but in the truncated space of density matrices that do not have ODLRO, that does not matter. The matrix elements of $\overline{H}$ can be defined by the restricted gauge transformation,

$$\langle \mathbf{X}, \xi, \mathbf{x}_1, \xi_1, \ldots, \mathbf{x}_N, \xi_N | \overline{H} | \mathbf{X}', \mathbf{x}_1', \xi_1', \ldots, \mathbf{x}_N', \xi_N' \rangle = \overline{V} \langle \mathbf{X}, \xi, \mathbf{x}_1, \xi_1, \ldots, \mathbf{x}_N, \xi_N | H | \mathbf{X}', \xi', \mathbf{x}_1', \xi_1', \ldots, \mathbf{x}_N', \xi_N' \rangle, \tag{13}$$

whenever all pairs $(\mathbf{x}_j, \mathbf{x}_j')$ obey $|\mathbf{x}_j - \mathbf{x}_j'| < a$. Other matrix elements of $\overline{H}$ can be taken to vanish because they only multiply vanishing matrix elements of the density matrix. The multiple-valuedness problem has been eliminated, and once again the interaction of the external magnetic field with the particles in the conductor has been removed from the Hamiltonian and the density matrix.

 0031-9007/96/77(11)/2346(1)$10.00