
 ERRATUM

VARIATIONAL PRINCIPLE FOR MANY-FERMI-
ON SYSTEMS. Elliott H. Lieb [Phys. Rev. Lett.
46, 457 (1981)].

The name of the author was misspelled in the printed version. The correct spelling is as given above.

Since the meaning of the abstract was adversely affected by editorial processing, the entire abstract is reproduced below for clarification:

If ψ is a determinantal variational trial function for the N -fermion Hamiltonian, H , with one- and two-body terms, then $e_0 \leq \langle \psi, H\psi \rangle = E(K)$, where e_0 is the ground-state energy, K is the one-body reduced density matrix of ψ , and $E(K)$ is the well-known expression in terms of direct and exchange energies. If an *arbitrary* one-body K is given, which does not come from a determinantal ψ , then $E(K) \geq e_0$ does not necessarily hold. It is shown, however, that if the two-body part of H is positive, then in fact $e_0 \leq e_{\text{HF}} \leq E(K)$, where e_{HF} is the Hartree-Fock ground-state energy.

Considerable distortions of the correct forms in the original manuscript have necessitated the following changes in the printed version:

On page 457, first column, line 5 should read "... which *satisfies the Pauli principle* is required."

On page 458, second column, lines 5 and 6 should read "... N orthonormal vectors V^1, \dots, V^N in l^2 , the Hilbert space of square-summable sequences indexed by the positive integers (i.e., $V \in l^2$ means $\sum_{j=1}^{\infty} |V_j|^2 < \infty$), such that $\sum_{i=1}^N |V_j^i|^2 = c_j$."

On page 458, second column, lines 5 and 6 in the proof of the theorem should read "Let V^1, \dots, V^N be the vectors of the lemma..."

On page 458, second column, line 11 in the proof of the theorem should read "... over $[0, 2\pi)^{\mathbb{Z}_+}$..."

In addition, the following correction should be noted:

On page 457, the c_j on the right-hand side of Eq. (3) should be deleted.