 E R R A T A

ELECTRON-HYDROGEN PHASE SHIFTS JUST BELOW THE INELASTIC THRESHOLD. A. Temkin and R. Pohle [Phys. Rev. Letters **10**, 22 (1963)].

After our Letter was published, Dr. T. F. O'Malley kindly pointed out to us that in view of a theorem of Wigner,¹ the phase shifts could not exhibit the large negative slopes shown in Fig. 1. We have re-examined δ_0 and found it to go through π at $k=0.8645$. The values of δ_0 in Table I are all correct, but for continuity they should be augmented by π for $k \geq 0.865$. The same can be confidently said for $\delta_{(1)}$. Therefore, our cross sections in Fig. 2 should both show one peak followed by a dip through zero.

We want to emphasize, however, that this does not alter a major aspect of our calculation: The coupling of Φ_0 and Φ_1 in Eqs. (3) cannot explain the large downward shift of the $\Phi_0^{(0)}$ resonance ($E \cong 10.15$ eV) to the close-coupling value ($E \cong 9.6$ eV). Nevertheless, a calculation of Holøien² shows there is a bound state of the singlet H^- system at an energy below 9.4 eV. Because of the theorem of Wigner,¹ this must be accompanied by a sharp rise in the $e-H$ phase shift at the corresponding energy. The increase by π in the $1s-2s-2p$ close-coupling phase shift must clearly correspond to this compound state. The only reconciliation of this situation with our calculation is that this must be a separate resonance from the one in $\Phi_0^{(0)}$. We are therefore led to expect two resonances in the singlet s -wave $e-H$ scattering. The first is a broader

one like the close-coupling result, but centered at a slightly lower energy ($E \cong 9.4$ eV); the second will be narrower and centered at $E \cong 10.1$ eV.

Since we continue to predict two resonances,³ the physical reasons given in our Letter for that situation are still very much felt to be valid. In this connection it is worth noting that Holøien² also has indications of two close-lying compound states.

¹E. P. Wigner, Phys. Rev. **98**, 145 (1955).

²E. Holøien, Proc. Phys. Soc. (London) **A71**, 357 (1958).

³A. Temkin, National Aeronautics Space Administration Technical Note D-1720 (unpublished).

SOME CONDITIONS FOR THE APPARENT VANISHING OF THE ENERGY GAP IN SUPERCONDUCTORS. H. Suhl and D. R. Fredkin [Phys. Rev. Letters **10**, 131 (1963)].

The symbol $\vec{\tau}$ in the third equation before the end of p. 132 should read:

$$\vec{\tau}_{kk'}.$$

The right-hand side of the second equation before the end of p. 132 should read:

$$-i\frac{g}{N} \sum_{k'' \neq k} \frac{T_{k''k} \tilde{S}_{k-k''}}{\epsilon_{k''} - \epsilon_k} + O(g^2).$$