

Philpott and Halderson Respond: Birchall and McKee are correct in objecting to the redundancy in our sentence to which they refer in their opening paragraph. The two aspects which must simultaneously be present to obtain a nonvanishing $P - A$ difference are (i) a mechanism which yields a nonvanishing transverse spin-flip probability and (ii) a means, presumably the broken charge symmetry, whereby the *asymmetry* of this spin-flip probability is created.

Birchall and McKee give a kinematical demonstration which shows that the two spin-flip transition probabilities $T_{\uparrow\uparrow}$ and $T_{\downarrow\downarrow}$ are equal, provided that isospin symmetry (IS) and time-reversal invariance (TRI) are assumed, viz.,

$$\text{Birchall and McKee: } (\text{TRI and IS}) \supset (T_{\uparrow\uparrow} = T_{\downarrow\downarrow}).$$

However, this proposition is already contained in the results of Conzett and Arnold, which may be written

$$\text{Conzett: } (\text{TRI and IS}) \supset (P = A),$$

$$\text{Arnold: } (P = A) \equiv (T_{\uparrow\uparrow} = T_{\downarrow\downarrow}).$$

The above results indicate that an asymmetry in the spin-flip probability may occur as a consequence of the breaking of isospin symmetry, but an *equivalence* has not been established and clearly does not exist. Indeed, isospin symmetry is always broken by the Coulomb interaction, but significant differences between P and A have only recently been observed. As we discuss in Ref. 1, there are several subtle conditions which must be met before large differences occur.

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¹R. J. Philpott and D. Halderson, *The (p,n) Reaction and the Nucleon-Nucleon Force*, edited by C. D. Goodman *et al.* (Plenum, New York, 1980), p. 491.

ERRATUM

DIELECTRIC RESPONSE OF A THIN-LAYER ZERO-GAP SEMICONDUCTOR. J. G. Broerman
[Phys. Rev. Lett. 45, 747 (1980)].

The results of this calculation are incorrect, and follow from an error in the solution of the effective-mass equation for the spatially confined p -like conduction and valence bands, which effectively decoupled them. This, in turn, led to an approximate parabolic form for the subband dispersion, simple interband matrix elements [Eqs. (3) and (4)], and the approximate reduction to a formally equivalent bulk calculation for the zero-momentum-transfer dielectric function [Eq. (2)]. The corrected solution of the effective-mass equation yields subband dispersion and interband matrix elements of a very complex and qualitatively different form, which will be reported on later.