K. W. H. Stevens and K. A. Hay. We also thank D. F. Nicoli and M. Tinkham for communicating their experimental results on $CoCl_2 \cdot 2D_2O$ prior to publication.

Note added in proof. It has just come to our attention that two neutron-diffraction groups have recently observed magnetic excitations interacting

¹See, for example, R. L. Comstock, Proc. IEEE <u>53</u>, 1508 (1965).

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³S. J. Allen and H. J. Guggenheim, Phys. Rev. Letters <u>21</u>, 1807 (1968); Phys. Rev. B <u>4</u>, 937 (1971); Phys. Rev. B 4, 950 (1971).

⁴R.M. MacFarlane, Phys. Rev. Letters <u>25</u>, 1454 (1970).
 ⁵K. A. Hay and J. B. Torrance, Jr., J. Appl. Phys.

40, 999 (1969). ⁶J. B. Torrance, Jr. and M. Tinkham, Phys. Rev. <u>187</u>,

 7 This work is also the basis of a talk given by one of

the authors (J. B. T.) at the Princeton Conference on Exchange Interactions, May 12-14, 1971 (unpublished).

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 10 D. F. Nicoli and M. Tinkham (private communication). 11 We approximate the symmetry about the Fe²⁺ site as

orthorhombic, with principal axes x, y, z. As an indication of the actual departure from orthorhombic symmetry, the Fe-Cl bond inclines 43.6° (instead of 45°) from the nearest-neighbor Fe-Fe bond and 12.3° from the axis of with high-k acoustic phonons. This interaction has been observed in FeCO₃ by Wrege, Spooner, and Gersch, ²⁰ and in FeF₂ by Rainford and Houmann. ²¹ In addition, Lovesey²² has made a calculation (based on a similar mechanism to the one described here) of the magnon-acoustic-phonon coupling in FeF₂ and finds good agreement with experiment.

magnetization (z).

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¹⁴A. Abragam and M. H. L. Pryce, Proc. Roy. Soc. (London) A205, 135 (1951).

¹⁵This result can be most easily seen if S_x and S_y are transformed into the raising and lowering operators S^* and S^- .

¹⁶That the interacting phonon transforms like yz or xz can be seen directly using group theory.

¹⁷R. Ingalls, Phys. Rev. <u>133</u>, A787 (1964).

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18). ²⁰D. E. Wrege, S. Spooner, and H. A. Gersch, Proceedings of the Magnetism and Magnetic Materials Conference, Chicago, November, 1971 (AIP, New York, 1972).

²¹B. D. Rainford and J. C. G. Houmann (unpublished).
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ERRATA

Mössbauer Studies on ⁵⁷ Fe Atoms in Rare-Gas Matrices between 1.45 and 20.5 K, T. K. McNab, H. Micklitz, and P. H. Barrett [Phys. Rev. B <u>4</u>, 3787 (1971)]. There is an error in the association between figure captions and the figures in Figs. 4, 5, and 6. The figure above Fig. 4 caption is Fig. 5, the figure above Fig. 5 caption is Fig. 6, and the figure above Fig. 6 caption is Fig. 4.

Calculation of the Spin-Lattice Coefficients of Gd^{3+} in CaF₂ Using a Point-Charge Model for the Crystalline Field, R. Calvo, M. C. G. Passeggi, and M. Tovar [Phys. Rev. B <u>4</u>, 2876 (1971)]. We discovered an algebraic error in Eq. (12) where $B_{5g}^{(4)}$, $B_{5_{\varepsilon}}^{(6,a)}$, and $B_{5_{\varepsilon}}^{(6,b)}$ should have opposite signs. As a consequence, the value of $G_{5_{\varepsilon}}^{(2)}$ obtained from Eq. (11) is $G_{5_{\varepsilon}}^{(2)} = +0.07 \text{ cm}^{-1}$ in disagreement in sign with the experimental value. There is also a typographical error in Eq. (9), where $B_{5_{\varepsilon}}^{(4)}$ should be multiplied by $(C_{2}^{(4)} - C_{-2}^{(4)})$.

Zener Theory, W. A. Smit and G. Vertogen [Phys. Rev. B 4, 2249 (1971)]. The denominator in the right-hand side of formula (24) should be replaced by $12[2-f^2(R)] [4-f^2(R)]$. This change is necessary because of a page make-up error and does not alter any of the results in the paper.