ERRATUM

ACCURATE VALUES OF NUCLEAR MAGNETIC MOMENTS OF FRANCIUM ISOTOPES. Mina Vajed-Samii, J. Andriessen, B. P. Das, S. N. Ray, Taesul Lee, and T. P. Das [Phys. Rev. Lett. 48, 1330 (1982)].

The values quoted for the nuclear magnetic moments for francium isotopes in this paper were based on a many-body perturbation-theory calculation of the hyperfine field at the nucleus. We have recently repeated the hyperfine-field calculation using a spherical distributed-charge nucleus with uniform density and radius given by $1.2A^{1/3}\times 10^{-13}$ cm. The new value of the hyperfine field is about 14% lower than our earlier value, of which 10.5% is the reduction due to the distributed nature of the nucleus and 3.5% from improvement in the accuracy of the point-nucleus calculation. Our corrected values of the nuclear moments of francium isotopes are $\mu(^{208}\mathrm{Fr}) = (4.56 \pm 0.14)\mu_N$, $\mu(^{209}\mathrm{Fr}) = (3.78 \pm 0.10)\mu_N$, $\mu(^{210}\mathrm{Fr}) = (4.23 \pm 0.14)\mu_N$, $\mu(^{211}\mathrm{Fr}) = (3.84 \pm 0.10)\mu_N$, $\mu(^{212}\mathrm{Fr}) = (4.45 \pm 0.14)\mu_N$, and $\mu(^{213}\mathrm{Fr}) = (3.86 \pm 0.10)\mu_N$. The revised value for $\mu(^{211}\mathrm{Fr})$ agrees within the confidence limit of our result with a recent value obtained through gyromagnetic ratio measurements[1] by the atomic-beam magnetic resonance technique. Additionally our results indicate that the ratios of direct, exchange core polarization, and correlation contributions are nearly the same for the point-nucleus[2] and distributed-nucleus approximations.

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[1]C. Ekström and L. Robertsson, to be published.
[2]Mina Vajed-Samii *et al.*, J. Phys. B 15, L379 (1982).