Erratum: Gradient term in the Kohn-Sham exchange-correlation potential [Phys. Rev. B <u>10</u>, 2221 (1974)]

Leonard Kleinman

Equation (34) is missing a minus sign. It should read

$$g_{\rm xc}^{(2)}(k_F) = -(\pi^2/k_F^3)\Omega(k_F)$$
.

Figure 1, a graph of Ω as a function of πk_F in Hartree atomic units, is incorrect as originally published although Eqs. (24)-(32) from which it was obtained are correct. The corrected figure

is shown here where the dashed curve is Sham's Ω . I thank Dr. A. K. Rajagopal for sending me a preprint of his paper and for pointing out that Sham's Ω is exact in the limit $k_F + \infty$. My Ω indeed does approach Sham's in that limit. However, my Ω curve differs from that of Rajagopal and Ray [Phys. Rev. B 12, xxx (1975)] in that it is somewhat more peaked.

