ERRATUM and ADDENDUM to "Relativistic Radial Equations for Two Spin–1/2 Particles with a Static Interaction: Part Two" by W. Kluźniak, W. Królikowski and J. Rzewuski, *Acta Phys. Pol.* **B9**, 43 (1978).

In the radial equations listed in Table II (derived in Appendix from the relativistic Breit equation (1) with the static potential (A1)) there are errors in terms containing $v'(r)$ (i. e., in the Breit-like terms). The correct form is

$$\frac{d}{dr} f_2 + \frac{1}{2}(\kappa^{(1)} - \kappa^{(2)}) f_4 + \frac{1}{2}(\varepsilon - v) f_3 = 0,$$

$$-\left(\frac{d}{dr} + \frac{2}{r}\right) f_3 + \frac{1}{2}(\kappa^{(1)} + \kappa^{2}) f_1 + \frac{1}{2}(\varepsilon - v - 2v') f_2 + \frac{i\sqrt{j(j+1)}}{r} g_4 = 0,$$

$$\frac{1}{2}(\kappa^{(1)} - \kappa^{(2)}) f_3 + \frac{1}{2}(\varepsilon - v) f_4 + \frac{i\sqrt{j(j+1)}}{r} g_2 = 0,$$

$$\frac{1}{2}(\kappa^{(1)} + \kappa^{(2)}) f_2 + \frac{1}{2}(\varepsilon - v + 2v') f_1 = 0,$$

$$\left(\frac{d}{dr} + \frac{1}{r}\right) g_2 + \frac{1}{2}(\kappa^{(1)} - \kappa^{(2)}) g_4 + \frac{1}{2}(\varepsilon - v - v') g_3 = 0,$$

$$-\left(\frac{d}{dr} + \frac{1}{r}\right) g_3 + \frac{1}{2}(\kappa^{(1)} + \kappa^{(2)}) g_1 + \frac{1}{2}(\varepsilon - v - v') g_2 - \frac{i\sqrt{j(j+1)}}{r} f_4 = 0,$$

$$\frac{1}{2}(\kappa^{(1)} - \kappa^{(2)}) g_3 + \frac{1}{2}(\varepsilon - v + v') g_4 - \frac{i\sqrt{j(j+1)}}{r} f_2 = 0,$$

$$\frac{1}{2}(\kappa^{(1)} + \kappa^{(2)}) g_2 + \frac{1}{2}(\varepsilon - v + v') g_1 = 0.$$

The second independent subsystem of eight equations can be obtained by the substitution $\kappa^{(1)} \to -\kappa^{(1)}$. The total parity $P = \eta\beta^{(1)}\beta^{(2)}(-1)^l$, where $\eta^2 = 1$, has the eigenvalue $P = \eta$ for components f and g in the first subsystem of equations and the eigenvalue $P = -\eta$ for f and g in the second. So, in general there is a splitting between energy spectra following from both subsystems of equations.

It is known that the Breit-like terms in the relativistic Breit equation are to be handled only by the first-order perturbation calculation, unless the potential is projected on the positive-energy particle and antiparticle subspace as follows automatically from the Bethe-Salpeter equation.

In consequence of the correction in Table II, Eq. (A5) corresponding to $j = 0$ should formally read

$$\frac{d}{dr} f_2 + \frac{1}{2}\left[\varepsilon - v - \frac{(\kappa^{(1)} - \kappa^{(2)})^2}{\varepsilon - v}\right] f_3 = 0.$$

$$-\left(\frac{d}{dr} + \frac{2}{r}\right) f_3 + \frac{1}{2}\left[\varepsilon - v - 2v' - \frac{(\kappa^{(1)} + \kappa^{(2)})^2}{\varepsilon - v + 2v'}\right] f_2 = 0.$$

The same correction as in Table II should be also made in Table I published in the Trieste preprint IC/77/71 (1977).