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Erratum: Avoidance of singularities in spherically symmetric charged dust [Phys. Rev. D 73, 124033 (2006)]

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In our paper published in Phys. Rev. D **73**, 124033 (2006) we made two incorrect statements in Sec. 11:

(1) With the function $\Gamma = 1/\sqrt{1 + bx^{4/3}}$, the regularity condition at the center, $\lim_{\mathcal{M}\to 0} R/\mathcal{M}^{1/3} = \beta(t), 0 < \beta(t) < \infty$ is not fulfilled: we have $\beta = 0$, which implies a permanent central singularity. This problem is cured by changing Γ to $\Gamma = 1/\sqrt{1 + bx^{5/3}}$, which causes a chain of changes in the other functions in the example given in Sec. 11. The qualitative conclusions remain unchanged, but the numbers, in particular, in the figures, do change. The minimal ratio of the total charge to the total mass decreases to $0.095\sqrt{G}$, which is even better from the point of view of observational constraints. The text of the paper with all the corrections fully incorporated is available from gr-qc 0602090.

(2) In Fig. 10 we compared the radius of the inner Reissner–Nordström horizon, R_{H_-}, with the minimal radius of the pulsating charged dust ball, R_+. The figure showed that, as expected, $R_+ < R_{H_-}$, except at the point x_0 where R_{H_-} has its maximum. At x_0, the two curves looked to be tangent. We stated that a numerical evaluation showed that $R_+ < R_{H_-}$ also at x_0. This was incorrect—the statement was based on a numerical error. In truth, the two curves *are* tangent, and they *must be* tangent at every local extremum of R_{H_-}, independently of the specific forms of the functions involved. The proof of this fact will be given in a forthcoming paper of ours.

