# ERRATA

## Total Hadronic Cross Section in $e^+e^-$ Annihilation at the Four-Loop Level of Perturbative QCD [Phys. Rev. Lett. 66, 560 (1991)]

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There is a minor misprint in Eq. (16). A minus sign is missing. Equation (16) for $\beta_{\rm QED}(\alpha)$ should read as follows:

$$\beta_{\rm QED}(\alpha)=\frac{4}{3}N\left(\frac{\alpha}{4\pi}\right)^2+4N\left(\frac{\alpha}{4\pi}\right)^3-N\left(2+\frac{44}{9}N\right)\left(\frac{\alpha}{4\pi}\right)^4-N\left\{46+\left[\frac{832}{9}\zeta(3)-\frac{760}{27}\right]N+\frac{1232}{243}N^2\right\}\left(\frac{\alpha}{4\pi}\right)^5. \quad (16)$$

This result was first reported by Gorishny, Kataev, Larin, and Surguladze.[1]

An independent calculation of $R(s)=\sigma_{\rm tot}(e^+e^-\rightarrow\gamma\rightarrow\text{hadrons})/\sigma(e^+e^-\rightarrow\mu^+\mu^-)$ has recently been completed by Gorishny, Kataev, and Larin.[2] Their results agree completely with our results given in Eqs. (10)–(13), provided one replaces the coefficient $\frac{4}{3}$ in the second-to-last term of Eq. (10) by $C_F$. This is a nonessential difference since, for the usual gauge group SU(3), $C_F=\frac{4}{3}$.

[1]S. G. Gorishny, A. L. Kataev, S. A. Larin, and L. R. Surguladze, in Proceedings of the International Seminar Quarks-90, Telavi, Georgia, U.S.S.R., May 1990 (unpublished); Phys. Lett. B (to be published).

[2]S. G. Gorishny, A. L. Kataev, and S. A. Larin, in Proceedings of the First International CERN-IHEP-JINR Workshop on the Standard Model and Beyond, Dubna, 1–5 October 1990 (unpublished); Phys. Lett. B (to be published).

## Response of Manifolds Pinned by Quenched Impurities to Uniform and Random Perturbations [Phys. Rev. Lett. 66, 1473 (1991)]

Yonathan Shapir

In the abstract, $p<L^{-1/\phi_p}$ should be $p<L^{-\phi_p}$.

On p. 1475 (right column), in the first line of the second paragraph, $\zeta(D)<(D-4)/4$ should be $\zeta(D)<(4-D)/4$.

On p. 1476, the line preceding Eq. (17), $\sim pL^{[D+(1-\beta')\zeta]/L}$ should be $\sim pL^{[D+(1-2\beta')\zeta]/2}$.

In the last equation on p. 1476, the right-hand side, $-\beta'\zeta/2$, should be $-\beta'\zeta$.

In the fourth line from the bottom, left-hand column (p. 1476), $\beta'<\frac{3}{2}$ should be $\beta'<\frac{3}{4}$.

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