Errata

Erratum: Asymmetry between inclusive charmed and anticharmed modes in B^0, $\bar{B}^0$ decay as a measure of CP violation [Phys. Rev. D 37, 3186 (1988)]

Isard Dunietz and Robert G. Sachs

Equation (24) should be replaced by

$$\langle \bar{a}/a \rangle_1 = \frac{-\langle (E_b + m_b - E_d + m_d)^2 - [(E_u - m_u) - (E_c - m_c)]^2 \rangle}{(E_b + m_b - E_d + m_d + E_c - m_c - E_u + m_u)^2}$$

so that Eq. (25) becomes

$$1.0 \lesssim |\langle \bar{a}/a \rangle_1| < 1.3 \ .$$

There is no significant effect on the final results or conclusions. We thank Marc Kamionkowski for calling this error to our attention.

Erratum: Strategies to search for the standard-model Higgs boson at a 1-TeV e^+e^- collider [Phys. Rev. D 38, 2735 (1988)]

P. R. Burchat, D. L. Burke, and A. Petersen

There was an error in the simulation of the detector which resulted in mass peaks which were too narrow for the quoted resolution. The effect is only significant if the Higgs-boson mass is near the $W^{\pm}$ mass. Then the primary production mechanism is $e^+e^- \to \nu_e \bar{\nu}_e H^0$ and the major background is $e^+e^- \to e^+\nu_e W^-$. After correcting the error,[1] the $W^{\pm}$ mass peak from $e^+e^- \to e^+\nu_e W^-$ is approximately twice as wide as previously reported, dominating the signal for a Higgs-boson mass less than about 150 GeV. However, the Higgs-boson signal remains significant down to a mass of about 130 GeV if the resolution of the hadronic calorimetery in the detector is improved from $(50\%/\sqrt{E})$ GeV$^{1/2}$ to $(35\%/\sqrt{E})$ GeV$^{1/2}$.

The error has no significant efffect on searches for heavier Higgs bosons since the width of the signal is then dominated by the natural width of the Higgs-boson mass which increases as $M^3_{H^0}$.

In a CERN study[2] of search strategies for a heavy Higgs boson at the CERN Linear Collider (CLIC) ($\sqrt{s} = 2$ TeV), it was found that the process $e^+e^- \to e^+\nu_e Z^0 W^-$ constitutes a significant background to signals from Higgs bosons with masses above 500 GeV. This background was not considered in our study but is not as significant[3] for searches for $M_{H^0} \lesssim 500$ GeV at $\sqrt{s} = 1$ TeV because the background cross section, compared to that of the signal, is lower and the width of the Higgs boson is considerably smaller. The background cross section depends on the energy spectrum of beamstrahlung photons created during the collision.

We thank P. Grosse-Wiesmann for bringing the above error and oversight to our attention.

[1] J. Alexander *et al.*, in Proceedings of the DPF Summer Study on High Energy Physics in the 1990s, Snowmass, Colorado, 1988, edited by S. Jensen (unpublished). This work contains corrected mass plots as well as studies of heavy-quark-flavor tagging as a means to enhance Higgs-boson signals with respect to standard-model backgrounds.

[2] F. Richard, in *Proceedings of the Workshop on Physics at Future Accelerators,* La Thuile, Italy, 1987, edited by J. H. Mulvey (CERN Report No. 87-07, Geneva, Switzerland, 1987); B. Mele, *ibid.*

[3] E. Yehudai (private communication).

