

Erratum: $Z \rightarrow b\bar{b}$ decay asymmetry and left-right models [Phys. Rev. D **66**, 013004 (2002)]

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The model with couplings of the new right-handed interactions to the third generation of fermions as defined in Eq. (5) is ruled out by Z-pole data for $\tau^+\tau^-$. The relation between the τ -lepton couplings and the b -quark couplings to the new gauge bosons is dictated by anomaly cancellation and the requirement of minimal new fermion content (only one right-handed neutrino). To relax this relation and make the model viable it is necessary to introduce additional vector-like fermions. This can be done in several ways, for example: (a) Adding a charged lepton pair to the third generation, $E_R = (1, 1, 1)(-2)$ and $E_L = (1, 1, 1)(-2)$. The L_L and E_R behave like the SM third generation leptons, and the L_R and E_L can be made heavy through the large H_R VEV. (b) Giving all the leptons SM quantum numbers and introducing new vector-like quarks to cancel the anomalies in a manner similar to that of a “leptophobic” Z' model.