$$D: \begin{pmatrix} p \\ n^c \end{pmatrix}_L , \quad \begin{pmatrix} p' \\ \lambda^c \end{pmatrix}_L ; \begin{pmatrix} p \sin\alpha + p' \cos\alpha \\ x \end{pmatrix}_R .$$

Model A: This is the standard GIM model and the mixing effects, which have already been discussed in the literature, need only be briefly summarized. This model has no charm-changing neutral currents and the second-order contributions to $\Delta m/\lambda$ from the ultraviolet region are small. Therefore $\Delta m/\lambda$ should be comparable to $\Delta\lambda/\lambda$. The off-diagonal elements in the decay ray matrix are suppressed relative to the diagonal elements by $\tan^2\theta_c$ and also by a factor which measures breaking of strong SU(3) symmetry. We therefore expect that $\Delta\lambda/\lambda$ is at most of order $\tan^2\theta_c$. Altogether, therefore, we expect $r \lesssim \tan^4\theta_c \sim 10^{-3}$.

Model B: This is the model[9] aready discussed above in connection with the K_L-K_S mass difference, where it runs into trouble. For the question of D^0-$\bar{D}^0$ mixing, on the other hand, the ultraviolet contribution to Δm is small: $\mathscr{L}_{eff}$ is again given by an obvious variation on Eq. (3), with the field operators λ and n replaced by p' and p and $m_{p'}$ replaced by $m_n \ll m_{p'}$. Also, there are no charm-changing neutral currents in this model. Substantial D^0, $\bar{D}^0$ mixing is therefore not to be expected. The contribution from the open and nearly open low mass channels could conceivably give contributions to $\Delta m/\lambda$ which, though not large, might be of order unity; but as we have argued qualitatively, when there are many open channels involving states with both signs of CP, we in fact, expect that $\Delta m/\lambda$ and