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## Noneperturbative QCD in $D^0$ - $D^0$ bar mixing

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Neutral charm meson mixing has first been observed in 2007 by Belle and Babar and soon after confirmed by LHCb and CDF. A longstanding discrepancy, of multiple orders of magnitude, is present between the leading order theoretical calculation of the so-called box diagram and the world average experimental value. The leading order theoretical value is extremely small due to the GIM mechanism which heavily suppresses the contribution. Efforts have been made to calculate the mixing by including higher order terms and nonperturbative contributions which, even though they are suppressed in the OPE, might bring about a higher final value due to breaking of  $SU(3)$ , i.e. having less effective GIM cancellation. In this talk I present preliminary results of our inclusive approach to calculating the  $D$ - $D$ bar mixing parameter.

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