

D-Dbar mixings from nonlocal condensate contributions

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We revisit the problem of nonperturbative contribution to the mass difference in $D0$ - $D0\bar{}$ mixing within the Standard Model.

As it is known the GIM cancellation in the leading OPE is very effective, and the SM calculation gives the result which is orders of magnitude smaller than the experimental value for this quantity. Therefore, it is necessary to go beyond the leading terms to catch the effects of operators of dimension 9 and dimension 12, appearing through the condensate contributions.

We investigate the size of nonlocal condensate contributions using various models. Our preliminary results show that the GIM suppression can be lifted within the approach

Alternate track

I read the instructions above

Yes

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