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# Remarks on Direct CP in K, D and B decays

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After decays of overcoming numerous challenging obstacles, first principles lattice methods recently reported a calculation by our RBC-UKQCD Collaboration [see R. Abbott et al, Phys.Rev. D102 (2020) no.5, 054509] of K to pi pi amplitudes and direct CP parameter epsilon'; also shedding light into the long-standing issue of the delta I=1/2 Rule. Wrt the experimental observation of direct CP in D0 decays, it is suggested that the neighboring resonances cause enhancements resulting in consistency of the experimental results with expectations from the SM. Lastly, while recent experimental progress in direct CP in B+ to K+ pi0 is an important step forward, it does not necessarily signify any anomalous behavior so long as reliable quantitative estimates canot be made of non-factorizable effects as well as of isospin violations given that isospin is not a symmetry of electroweak interactions.

## Summary

I'll discuss significant progress that has been made and challenges that remian

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