

Minor corrections

General: a couple of style conventions were not followed consistently

- Spelling out numbers less than or equal to ten
- Using Roman font for non-variable sub and superscripts, e.g. N_{total} was used rather than $N_{\rm total}$

You may want to consider adopting these.

P5 et seq. Kronin → Cronin (he was of Irish not Danish decent)

P5 [14-19] I don't think this list is complete or accurate as *CP* violation was certainly not observed in some of these. I think only the BPGGSZ papers for BABAR/Belle where γ was measured should be cited.

P7 stare → state

P9: What the sum j is over should be made clear in Eq. 2.9

P12 electroweak phase → weak phase

P15: I think p_i is do a lot of heavy lifting as a generic final state particle and a four vector. I think labelling the particles with something else might be good I think $P \rightarrow 1+2+\dots+n$ similar to PDG kinematics section would be clear. Also, not sure $m^2(p_1 p_2)$ are required as the Mandelstam variable is standard.

P16: by the Belle → by the BABAR and Belle collaboration ([56] is a joint publication)

P17: Eq. 2.24 this newly introduced nomenclature is not used consistently e.g. P18 Γ equality, and several others. If introduced it should be used everywhere.

P19: After our discussion make clear the second advantage of the model-independent measurement viz a viz. reinterpretation is really related to c_i and s_i not (x, y)

P29: Maybe add a sentence to make clear how the odd-even type bins still give sensitivity as we discussed in the viva.

P32: last line there should be a full stop after Ref.

P38: the Celsius symbol should have the degree before not after.

P39: $\$1T\$ \rightarrow 1\sim T$

P42: There should be a space between 120 mrad (100 mrad).

P47: "below together" doesn't seem right belong or match I think

P50: bracket missing after 1.3

P62: analysis if → analysis of

P66: equally → is equally

P79: final state → final stage

P80: depending → depending upon

P82: it's production ad → its production and

P82: make a reference to the fact that alternate multivariate classifiers were tried and BDT was as good as any other plus being well understood from earlier analyses e.g. data-MC agreement of inputs.

P92 et seq.: make clear that the efficiencies are with respect to a sample of reconstructed signal i.e. fiducial and basic reconstruction efficiency is already included, which is what brings the efficiency to the per mille level.

P99: punctuation is absent from the list of background categories

P115: Make a reference to the sPlot method validated in simulation in the earlier analysis and on its introduction give a one paragraph summary of the method rather than just the reference to Pivk and Le Diberder.

P117: take into the → take into account the

P120: make clear that the Bs background is also parametrized using Hills and Horns

P134 et seq: ie. → i.e.

P138 Fig 5.40: make a note that the absence of marginalization has no impact in these plots.

P151: observation different → observation of different

P154: Motivate the bootstrap method by saying there is a limited amount of MC data.

P154: ,for → , for

P157: when when → when

P158: opening quotation marks are closing ones in a couple of places and there is a non-italicized CP

P160 assesses → assessed

P161: parameters ; → parameters;

P166: Make a note that the toy study statistics are such that the uncertainties on some of the systematics are large hence the fluctuations among parameters.

P197: [78] Now published

<https://journals.aps.org/prd/abstract/10.1103/PhysRevD.102.052008>

P197: [83] has an orphaned comma that should be attached to the title

P197: [86] is now published

<https://journals.aps.org/prd/abstract/10.1103/PhysRevD.102.053003>

P198: [99] the colon doesn't look right