Comments on The Observation and Branching Fraction Measurement of Ds+->ΦP Zhengyun You

2021/8/6

1. ~~Title, Measurement of the Branching Fraction Ds+->ΦP~~
2. ~~Add email at the bottom of p1~~
3. ~~Abstract, … of e+e- collision data collected by the BESIII detector at √s= …, 4.226 GeV respectively, we measure …~~
4. ~~L13, branching ratio -> branching fraction~~
5. ~~We also obtain the relative ratio of B(Ds+->ΦK+)/ B(Ds+->Φpi+)=… for the first time.~~
6. ~~p3，add a ChangeLog for updates in each version~~
7. ~~p4, L52, add references for the heavy quark effective theory, QCD-inspired approaches~~
8. ~~p4, L53, these don’t -> they do not~~
9. ~~L54, quark with the order of 1.5 GeV,~~
10. ~~Combine paragraph 1 and 2~~
11. ~~L59, decays, which are Cabibbo-favored~~ …
12. change all “:” after Figure into “.”
13. ~~Figure 1. The typical Feynman diagrams at tree-level for …~~
14. ~~(b) for Ds+->ΦK+~~
15. ~~L62, Also, -> In addition,~~
16. ~~L62, analyzed~~
17. ~~L64, Use capital for all captions, such as Figure, Table~~
18. ~~L64, The current PDG values and theoretical predictions for … modes are summarized in Table 1 and Table 2.~~
19. L67, I~~t is necessary to improve the precision of these measurements.~~
20. L84, ~~on the latest BESIII work~~
21. ~~L85, of decays … and …~~
22. ~~L86, the relative ratio is~~
23. ~~p6, add a space between all figures and units, such as 1.0 T, 1 GeV/c~~
24. ~~p7, L103, add the data taking years for XYZ data~~
25. ~~Table 4, assume -> assuming~~
26. ~~p8, L112, is a part -> are parts~~
27. ~~p9, add |Vxy| < 1.0 cm, |Vz| < 10.0 cm~~
28. ~~p10, by the combination of -> by combinations of~~
29. ~~L154, e+e-~~
30. ~~L166, missed -> missing~~
31. ~~L176, an example, as is shown~~ …
32. ~~L177, the the -> the~~
33. ~~L188, It is clear that most of the events~~
34. ~~L189, properly -> proper~~
35. ~~L193, We request that~~
36. ~~L193, || -> or~~
37. ~~L198, has shown -> shows~~
38. ~~L199, For~~
39. ~~L199, add the reference paper for topology~~

~~X.Y. Zhou, S. Du, G. Li and C. Shen, TopoAna:~~ ~~A generic tool for the event type analysis of inclusive Monte-Carlo samples in high energy physics experiments, Comput. Phys. Commun. 258 (2021) 107540 [arXiv:2001.04016] [INSPIRE].~~

1. ~~L201, Figure 7. … different components of backgrounds.~~
2. ~~L207, add “,” after Fig. 8~~
3. ~~Figure 8. components~~
4. ~~p17, L222, by -> with~~
5. ~~L223, extracted~~
6. ~~use consistent description for Section or Sec. L196, L225,~~
7. ~~L229, Fig. 9 and Fig. 10.~~
8. ~~L231, L237, L238, by -> with~~
9. ~~L237-239, use consistent Eq.~~
10. ~~Table 7, why the error (0.007) in the second I/O check of Ds+->ΦK+ 8.365+-0.007 is so small in comparison with the other 3 I/O checks?~~
11. ~~L208, come -> coming~~
12. L299, how is the 4.1% assigned?
13. L307, how is the 1.1% assigned? in quadrature?
14. L324, same here, 1.2%?
15. ~~L320, is -> are~~
16. ~~L332, is -> are~~
17. ~~assumed -> assume~~
18. ~~Table 11, last line, the significant digits is not consistent, 4.02+-0.1~~