

HFLAV Charm Decays Group

Status

Paras Naik & Hailong Ma (conveners)



Expectations

- Group is up-to-date or has committed to be up-to-date by the end of May.
 - This only includes the text of the preprint.
We have also asked that shortly after May 31:
 - Webpages are up-to-date
 - Code (and instructions) are preserved in HFLAV gitlab
- Progress on both the text and other items is good.
- Group members have asked if a “HFLAV 2021” logo for plots will be provided.

Status

- Semileptonic decays (Hailong) - Most plots/text updated. Website to be updated.
- Leptonic decays (Hailong) - Most plots/text updated. Website to be updated.
- Hadronic D_0 decays and final state radiation (Paras) - D_0 BF done, except for DCS Kpi requiring new R_D. Website to be updated.
 - Paras starting to look into D^+/D_s FSR treatment, however there is unlikely to be something publishable for this preprint. Not urgent, given total errors on best measurements still well over 1%.
- Hadronic D_s decays (Alan/Paras) - Looked up BF to be added to averages, still have to perform update.
- Excited $D(s)$ mesons (Tara) - Averages and tables ready, updating theory notes.
- Excited charm baryons (John) - Tables and text updated.
- Rare and forbidden decays (Marco) - Plots and webpages up to date. Text to be updated.

Backup

Contributors

- Hailong Ma (IHEP, BES-III)
- Paras Naik (Bristol, LHCb)
- Tara Nanut (EPFL Lausanne, LHCb)
- John Yelton (Florida, BELLE)
- Marco Gersabeck (Manchester, LHCb)
- Alan Schwartz (Cincinnati, BELLE)

The Charm group of HFLAV has since Oct 2020 been split into two working groups to reflect the increased number of results in Charm physics.

- Charm decays
- Charm CP violation and oscillations

Charm Decays

- Hailong Ma (IHEP, BES-III)
- Paras Naik (Bristol, LHCb)
- Tara Nanut (EPFL Lausanne, LHCb)
- John Yelton (Florida, BELLE)

Charm Oscillations and CP violation

- Jolanta Brodzicka (Polish Academy of Sciences, LHCb)
- Marco Gersabeck (Manchester, LHCb)
- Alan Schwartz (Cincinnati, BELLE)

Overview

- As a reminder, the current set of sections is as follows:
 - Semileptonic decays (Hailong)
 - Leptonic decays (Hailong)
 - Hadronic D0 decays and final state radiation (Paras)
 - Hadronic Ds decays (Alan/Paras)
 - Excited D(s) mesons (Tara)
 - Excited charm baryons (John)
 - Rare and forbidden decays (Marco)
- Sections we would like to come back to at a future time:
 - Lambda_c hadronic (12 modes) / semi-leptonic (1 mode) averages. (Formerly Xiao-Rui Lyu Anze Zupanc)