

RF2: consolidation of the 25 Lols

(1) Rare η and η' decays (th+exp)

Editors: C.Gatto, L.Gan, S.Gardner, S.Tulin

(2) Rare charged pion decays: LFU and V_{ud} (exp)

Editors: D.Bryman, D.Hertzog

(3) Rare kaon decays, mainly $K \rightarrow \pi \nu \nu$, $K_S \rightarrow \mu^+ \mu^-$, $K_L \rightarrow \pi l^+ l^-$ (th)

Editor: A.Buras. Confirmed to be ready by March 15th

(4) Radiative kaon decays (th) – interest expressed

Possible editors: G.D'Ambrosio, M.Knecht

(5) Rare kaon decay experiments (exp) agreement reached and work started on a joint KOTO and NA62/KLEVER paper. Editorial team is established.

About 20% of the paper is written. Confirmed to be ready by March 15th

(6) New physics at kaon and hyperon factories, focus on hidden sectors (th+exp)

Exp contributions from NA62, KOTO, KLEVER, LHCb, BESIII, STCF

Editors: E.Goudzovski, D.Redigolo, K.Tobioka, J.Zupan

Entering the final stage of the editorial process; to be published by Christmas

(7) CKM 1st row unitarity tests (th)

Editor: E.Passemar. Final Results being presented at CKM2021 week of Nov. 22

Ongoing discussion / awaiting response from Lol authors:

❖ Novel EFT connections between K and B physics: no response

❖ Lattice QCD computations for rare kaon decays: no response