

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.
- (4) Radiative kaon decays (**th**) – **interest expressed**
Possible editors: G.D'Ambrosio, M.Knecht.
- (5) 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.
- (6) CERN high-intensity kaon beam facility (**exp**).
Editors: to be appointed within NA62+KLEVER collaborations.
- (7) CKM 1st row unitarity tests (**th**)
Editor: E.Passemar.

Ongoing discussion / awaiting response from Lol authors:

- ❖ Novel EFT connections between K and B physics.
- ❖ Future rare K_L decay experiments at J-PARC [possibly to be joined with (5)].
- ❖ Lattice QCD computations for rare kaon decays.