

FLAG2019

$|V_{cd}|$

$|V_{cs}|$

$N_f=2+1+1$

$N_f=2+1$

$N_f=2$

non-lattice

our estimate for  $N_f=2+1+1$

FNAL/MILC 17

ETM 17D/Riggio 17

ETM 17D ( $q^2=0$ )

ETM 14E

our estimate for  $N_f=2+1$

RBC/UKQCD 17

Meinel 16

$\chi$ QCD 14

HPQCD 11/10B

HPQCD 12A/10A

FNAL/MILC 11

our estimate for  $N_f=2$

Blossier 18

ETM 13B

neutrino scattering

CKM unitarity

0.20 0.22 0.24

0.95 1.00 1.05

