$b \to c$ FFs

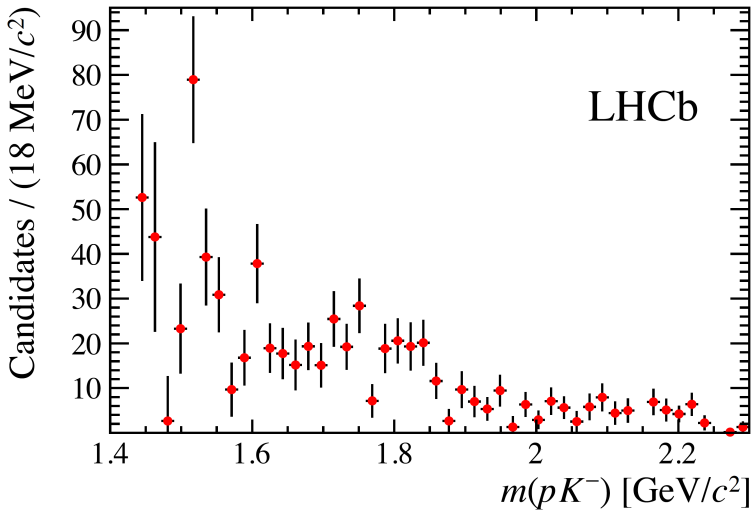
$R(D^*)$ Description	Value
HFLAV'19 WA exp.	0.295 ± 0.014
Fajfer'12 CLN	0.252 ± 0.003
Ligeti'17 BGL	0.257 ± 0.003
Gambino'17 BGL	0.260 ± 0.008
HFLAV'19 SM avg.	0.258 ± 0.005
BABAR BGL	0.253 ± 0.005

- HO HQET corrections.
- $R(D^*)$ seems $\sim$ immune to FF variations. But angular observables?...
- $B \to D^*$ angular moments: CLN had tiny errors!

- P_τ: -0.483 ± 0.027 (*BABAR*-BGL), $-0.38 \pm 0.51^{+0.21}_{-0.16}$ (Belle'17)
- CLN-Tanaka P_τ: -0.497 ± 0.013

$b \to s$ FFs

- LHCb has significant statistics for higher K^* resonances and $\Lambda_b^0 \to \Lambda^*$ decays.
- Just $\Lambda(1520)$ simply doesn't work for $\Lambda_b^0 \to \Lambda^*$:



- Can $\Lambda_b^0 \to \Lambda^* \gamma$ and $\Lambda_b^0 \to J/\psi \Lambda^*$ help?