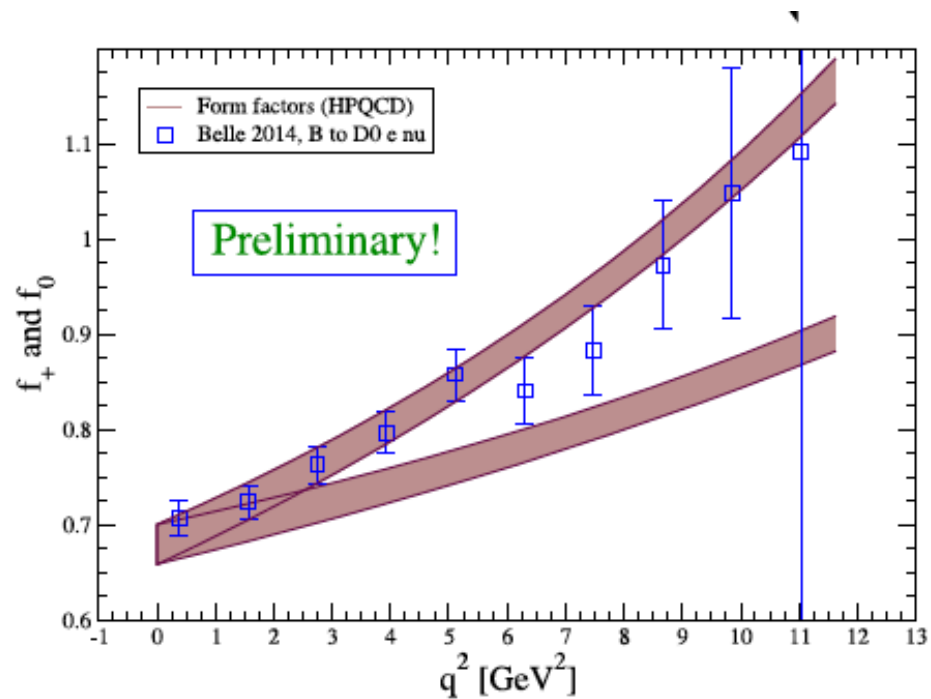


# Belle $B \rightarrow D \ell \nu$ spectrum

- preliminary results presented at ICHEP, CKM2014 by R. Glattauer
- Belle data more precise than Babar, prefer higher  $V_{cb}$



# Combined exp+lattice fit

- FNAL/MILC 1503.07237 use Babar data with 3.3% syst. error 100% correlated with z-expansion,  $N=2,3,4$  p-value  $\sim 0.5$   
 $|V_{cb}|=39.7(1.7)\times 10^{-3}$
- We repeat FNAL/MILC with preliminary Belle (full correlation):  
 $|V_{cb}|=41.8(1.2)\times 10^{-3}$  p-value  $\sim 0.015$
- Same with Babar & Belle:  
 **$|V_{cb}|=41.18(1.07)\times 10^{-3}$**   
stable wrt  $N=2,3,4$ , p-value 0.014
- Both expts have a bump at moderate z incompatible with unitarity bounds in the z-expansion

