

Expected experimental and theoretical accuracies for the UTA inputs in the What Next Era

UTA input	Belle II (2021)	LHCb upgrade (10y run)	Theory (2025)
$V_{cb}^{\text{incl.}}$	0.6%		
$V_{cb}^{\text{excl.}}$	1.2%		0.5% (f.f.)
$V_{ub}^{\text{incl.}}$	3%		
$V_{ub}^{\text{excl.}}$	5%		1% (f.f.)
$\alpha \ (B \rightarrow \pi\pi)$	1°		$\leq 1^\circ$
$\beta \ (c\bar{c}s)$	0.3°	0.2°	$\leq 0.1^\circ$ (today 0.3°)
$\gamma \ (B \rightarrow DK)$	1.5°	0.9°	0 ($< 10^{-7}$)
ε_K (today 0.5% exp. error)			0.5% (LD)
Δm_d			0.5% (B_d)
Δm_s			0.5% (B_s)
ϕ_s (today 4° exp. error)		0.4°	
A_{SL}^s			$\leq 10^{-6}$ (today $2 \cdot 10^{-6}$)
A_{SL}^d			(today $\leq 10^{-4}$) $\rightarrow \dots$