

# CP Violation

Theory + Exp in Intro chapter

- general  $t$ -dependent formalism

in intro chapter

- triggers & tagging efficiencies

## CP Chapter

• Discussion of simulated modes

• Review of role of penguins in extraction of CKM angles

• Discussion of CP as probe for new physics

- New mixing  $\leftrightarrow$  angles don't match sides

- SM 0 or small asymmetries

- What other modes are of interest / what measurement / expected BR. / why?

Modes

Priority I

$4 K_S$  ,  ~~$K_L$~~   
 $4 \phi$  , .  
 $4 \eta'$        $4 \eta$   
 $\pi\pi$  |  $K\pi$  |  $KK$

Priority II

$\rho\pi$        $\rho\gamma$   
 $DD$

Direct CP modes

$K\pi$        $K\eta'$

$K^{*+} \pi^-$

$DK$