CP violation in CMS: expected performance

CP violation studies in the $B^0 - \overline{B^0}$ system
(with full pattern recognition & momentum reconstruction
simulation in the tracker)

- $B_d^0 \to J/\Psi K_s^0$
  - introduction
  - $K_s^0 \to \pi\pi$ reconstruction
  - mass resolution
  - S/B
  - tagging methods and purity
  - expected sensitivity δ(sin2β)
  - time dependent asymmetry
- $B_s^0 \to J/\Psi\Phi$
  - introduction
  - selection criteria
  - mass and proper time resolution
  - S/B
  - expected sensitivity on asymmetry measurement

Conclusion