# physics

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Subjects can not be studied well at BF. or τcF has advantages

- resonances, ~~threshold~~

— J/ψ, ψ' can only be studied at τcF

- How important is the subject?
- Can glueball states be identified?
- Can BEPC/BES study it well?

luminosity? detector performances?

$>10^9$ J/ψ difficult for BEPC

— τ physics

| | BF | τcF |
|---|---|---|
| $M_{\nu_\tau}$ | 3 MeV → 10-15 MeV | ↑ |
| CP violation | ↑ | ↑ |
| | | polar. |

| | BF | τcF | |
|---|---|---|---|
| τ rare decay | | No difference | τ→eX |
| hadronic decay | | different systematic | |

| | BF | τcF |
|---|---|---|
| – Charm | | |
| | $D^0$ tag | $D^+$ decay |
| | $D_s$ tag ? | $D_s$ ? |

$D^0\bar{D}^0$ Mixing

physics topics to be clarified

τ CP violation, $M_{\nu_\tau}$ ) τcF reach

checking physics window { τ CP, $M_{\nu_\tau}$, $D^0\bar{D}^0$ Mixing

technique issues

1. No more difficult than BF, ΦF.
2. Understand Background
3. polarization.
   polarimeter
4. I.P.
   Detector optimization

real issue. A team with qualified, motivated persons

# Short-term plan

- Final review of BEPC/BES upgrade
- apply and get large increase in BEPC/BES operating budget
- Discussion of IHEP's scientific goal in the long run
- TCF Workshop in China