

Outlook – FPCP 2004

Keeping up the good things...

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on behalf of the LOC for
FPCP 2004 in Seoul, Korea

Free parameters of the Standard Model

- 17 free parameters in the electroweak interactions (not counting neutrinos)
 - G_F , α , $\sin^2 \theta_W$
 - 3 lepton masses
 - **6 quark masses**
 - **4 quark flavor mixing parameters (CKM)**
 - $m(\text{Higgs})$
- 10 of these are related with “quark flavors”

i.e. we still don't know much about flavor sector in the SM after all these years of learning...

FPCP 2003

- I learned a lot from this beautifully organized conference, for which I thank all the members of LOC, IAC, and supporting staffs.
- What I can tell my friends at home
 - to my theorist friends: *"at least I had a chance to learn what SCET is about..."*
 - to my senior colleagues: *"with $D_s^{(*)} \pi^0$'s... now I too feel the excitement of facing unexpected experimental discoveries..."*
- Of course, I learned lots more in other aspects of flavor physics, too.

Still we need more FPCP's for...

- BaBar/Belle discrepancies on $A_{CP}(t)$ in $B^0 \rightarrow \pi^+ \pi^-$
- $\sin(2\phi_1)$ from $B^0 \rightarrow \phi K_S, \eta' K_S, \text{ etc.}$
- Precision in V_{ub}
 - Improved L-QCD for $B \rightarrow \pi l \nu$ form-factor
 - Full reconstruction technique
 - Belle/BaBar combined, expecting $\sim 500/\text{fb}$ data
 - \sim million fully reconstructed B's ?
- Seeing $b \rightarrow d$ penguin would be great, too!
- Of course, there are many others...

FPCP 2004 in Seoul, Korea

- During the FPCP 2002 in Philadelphia, Tony Sanda sent us (CSKim, SKKim, JSKang, and YJK) an email, suggesting FPCP2004 in Korea.
- LOC was formed in April 2003, during the KPS meeting at Yonsei Univ., and decided
- Date: Oct. 11 – 15
with a day off for excursion
- Place: somewhere in Seoul
 - Seoul is a big, modern city
with >1000 years of history...

Why October?

- LOC decided to have it after the major summer conferences (e.g. ICHEP at Beijing) rather than before
- To give enough time for everyone (esp. theorists) to digest the results
- *By the way, October is the month of harvest festival in Korea and about the most comfortable time in a year*

Seoul in October...



Still not decided (among many things)

- Conference site
 - University campus or a luxury hotel?
 - In any case, we will provide economical alternative for lodging

