Abstract Submitted
for the DPF96 Meeting of
The American Physical Society

Sorting Category: 4.A.2

A Measurement of Br($D \to \phi X$) XINCHOU LOU, *Univ. of Texas at Dallas (representing the BES Collaboration)* — We report on a preliminary measurement of the branching fraction of the decay $D^+, D^0 \to \phi X$, where X can be any unidentified particles. Using the BES detector, a data sample of 22.3 pb^{-1} has been collected at a center-of-mass energy of 4.03 GeV at the BEPC e^+e^- storage ring. At this energy, the final states $D^*(2010)^+D^-$, $D^*(2007)^0\overline{D}^0$, $D^*(2010)^+D^*(2010)^-$, and $D^*(2007)^0\overline{D}^*(2007)^0$ are abundantly produced. In our analysis inclusive decays of the D^+ and D^0 are reconstructed to form a *singly-tagged* sample which identifies $D^*\overline{D}$ or $D^*\overline{D^*}$ events. In this singly-tagged sample we search for the ϕ meson recoiling against the D^+ or D^0. Based on events reconstructed, we determine the average branching fraction for $D^+, D^0 \to \phi X$. The measured branching fraction is compared to the available measurements of exclusive D^+, D^0 decays into final states containing a ϕ meson.

[X] Prefer Oral Session
[ ] Prefer Poster Session

Xinchou Lou
xinchou@utdallas.edu
University of Texas at Dallas

Date submitted: May 2, 1996

Electronic form version 1.1