

Abstract Submitted
for the APR06 Meeting of
The American Physical Society

Determination **of**
**Charm-Mixing and Doubly-Cabibbo-Suppressed Decay Parameters with
CLEO-c Data** ADAM LINCOLN, Wayne State University, CLEO COLLABORA-
TION — Information about charm mixing and doubly-Cabibbo-suppressed decays,
as well as improved precision for measurement of the D^0 -decay strong phase, can
be obtained by combining multiple decay-rate measurements in $\psi(3770) \rightarrow D^0\overline{D}^0$
events. We use a sample of $\sim 300\text{pb}^{-1}$ collected with the CLEO-c detector to mea-
sure the absolute branching fractions for semileptonic decays of D^0 mesons for which
flavor and CP properties are inferred from an accompanying hadronic tag and the
quantum coherence of the initial $D^0\overline{D}^0$ pair. We describe the fitting procedure for
combining these and hadronic decay measurements, give results for current data,
and project the ultimate sensitivity with the full CLEO-c sample for the relative
strong phase δ and mixing amplitude y .

David Cinabro
Wayne State University

Date submitted: 10 Jan 2006

Electronic form version 1.4