中国物理 C 2010 34 (06): 780—787 ISSN: 1674-1137 CN: 11-5641/O4 首页 当期目录 上一期

04 FLAVOUR PHYSICS

D^0D^0 mixing and other recent charm results from BABAR

B. Meadows (representing the BABAR collaboration)

University of Cincinnati, Department of Physics, Mail Location 0011, Cincinnati, OH 45221-0011, USA

收稿日期 2010-2-5 修回日期 网络版发布日期 2010-5-5 接受日期 2010-5-5

摘要

Studies in which BABAR data have shown evidence for mixing in the neutral charm meson system are presented. A new measurement of the lifetime difference parameter y_{CP} = (1.16±0.22±0.18)% is described. Results are also presented from a systematic study of DK and D^*K invariant mass distributions from a 470 fb^{-1} sample of asymmetric e^+e^- interactions recorded by the BABAR detector at the PEP-Ⅱ storage rings. A new charmed-strange meson has been observed with mass $[3044\pm8_{stat}(^{+30}_{-5})_{syst}]$MeV/$c^2$ and width $[239\pm35_{stat}(^{+46}_{-42})_{syst}]$MeV/$c^2$.

关键词 keyword, mixing, oscillations, charm, meson, spectroscopy

分类号

DOI:

通讯作者:

B.Meadows brian.meadows@uc.edu

作者个人主页:

B. Meadows (representing the BABAR collaboration)