D Mixing and CP Violation

Status of section

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D-mixing and CP violation Theory		draft in SVN not yet	
Brief history	B.M.,	not yet	
Mixing	B.G.		
CPV	B.M.,		
NP	B.G.	75.	
General Exp. Remarks		Semileptonic	
D* tagging	B.M.,	General remarks	B.M.
Decay-t resolution	B.G.	Comparison of results	K.F.
Decays to CP eigenstates		tagged/un-tagged	K.F:
Method	M.S.	t-integrated CPV measurements	
Results $KK/\pi\pi$	M.S.	Using data to measure	E.W.
Results $K_S \phi$ + others	A.Z.	eff. asymmetry	
Hadronic WS decays		Results $KK/\pi\pi$	M.S.
Formalism	B.M.	Multi-body ($KK\pi^0$, $\pi\pi\pi^0$, $KK\pi\pi$)	B.M.
Results $K\pi$	B.M.	T-odd correlations AP?/MM	?/BM
t-dependent Dalitz		t-dependent CPV measurements	ΑII
$K\pi\pi^0$	B.M.	Summary	ΑII
$K_{S}hh$	R.A.		
Other multibody	R.C.		

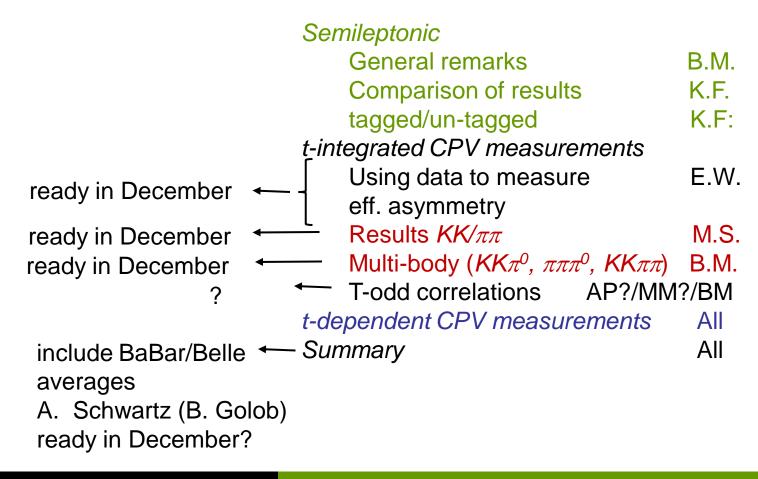
D-mixing and CP violation Theory Brief history Mixing CPV NP	B.M., B.G. B.M., B.G.	draft in SVN draft not yet in S not yet	VN
General Exp. Remarks		Semileptonic	
D* tagging	B.M.,	General remarks	B.M.
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Results $K_S \phi$ + others	A.Z.	eff. asymmetry	
Hadronic WS decays		Results $KK/\pi\pi$	M.S.
Formalism	B.M.	Multi-body ($KK\pi^0$, $\pi\pi\pi^0$, $KK\pi\pi$)	B.M.
Results $K\pi$	B.M.	T-odd correlations AP?/MM'	?/BM
t-dependent Dalitz		t-dependent CPV measurements	All
$K\pi\pi^0$	B.M.	Summary	All
$K_{S}hh$	R.A.		
Other multibody	R.C.		

D-mixing and CP violation Theory Brief history Mixing CPV NP	B.M., B.G. B.M., B.G.	draft in SVN draft not yet in S' currently being w not yet	
General Exp. Remarks		Semileptonic	
D* tagging	B.M.,	General remarks	B.M.
Decay-t resolution	B.G.	Comparison of results	K.F.
Decays to CP eigenstates		tagged/un-tagged	K.F:
Method	M.S.	t-integrated CPV measurements	
Results <i>KK</i> /ππ	M.S.	Using data to measure	E.W.
Results $K_S \phi$ + others	A.Z.	eff. asymmetry	
Hadronic WS decays		Results $KK/\pi\pi$	M.S.
Formalism	B.M.	Multi-body ($KK\pi^0$, $\pi\pi\pi^0$, $KK\pi\pi$)	B.M.
Results $K\pi$	R.C.	T-odd correlations AP?/MM?	?/BM
t-dependent Dalitz		t-dependent CPV measurements	All
$K\pi\pi^0$	B.M.	Summary	All
$K_{S}hh$	R.A.	•	
Other multibody	R.C.		

D-mixing and CP violation

```
Theory
    Brief history
                            B.M.,
    Mixing
                            B.G.
    CPV
                            B.M.,
    NP
                            B.G.
General Exp. Remarks
    D* tagging
                             B.M.,
    Decay-t resolution
                             B.G.
Decays to CP eigenstates
    Method
                                        ready in December
                             M.S.
    Results KK/\pi\pi
    Results K_S \phi + others
                            A.Z.
Hadronic WS decays
    Formalism
                                        ready in December?
    Results K\pi
t-dependent Dalitz
                             B.M.
    K\pi\pi\pi^0
                                         ready in December?
    K_{\rm S}hh
                             R.A.
    Other multibody
                            R.C.
```

D-mixing and CP violation



D-mixing and CP violation

```
t-dependent Dalitz
     K\pi\pi\pi^0
     K_S h h
     Other multibody
```

```
B.M.
R.A.
R.C. \longrightarrow includes D<sup>0</sup> \rightarrow K3\pi
              (phase space integrated);
              to be moved to
                   Hadronic WS decays
                         Formalism
                                                     B.M.
                         Results K\pi
                                                     R.C.
```

7 pages

B.M

K.F.

K.F. J

D-mixing and CP violation

Semileptonic
General remarks
Comparison of results
tagged/un-tagged

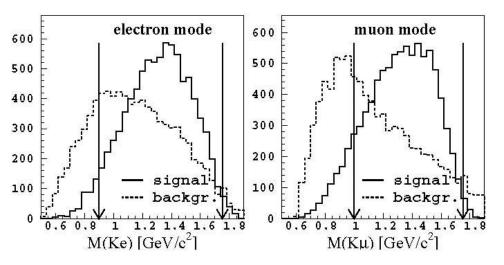
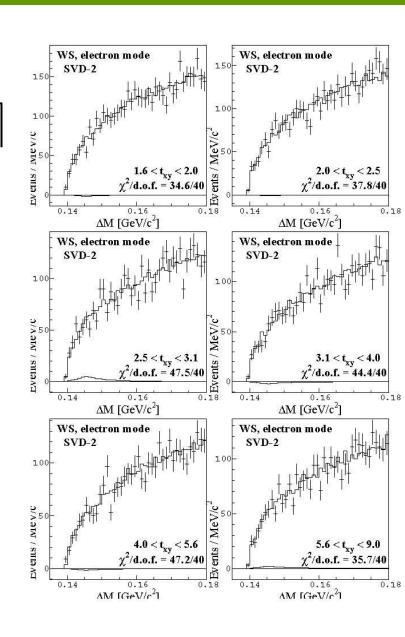


Fig. 12. Distribution of $M(K\ell)$ for signal (solid line) and background events (dashed), normalized to the same number of entries. The arrows show the selected mass range. The left (right) plot is for the electron (muon) decay mode.



D-mixing and CP violation

Semileptonic
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7 pages
B.M.
K.F.
K.F.

To be shortened;

Belle/BaBar measurements described strictly separated (important distinction in tagging) → to be checked

Title

Ikaros:

Mixing → Oscillations

to me: t-independent

t-dependent

agree with the proposal

Summary

Really missing: (part of) one subsections and the summary

Hopefully ready in December