

# Bs and Bd mixing

Silas Hoffman and Georg Steinbrueck

*G. Steinbrueck and S. Hoffman*

	$\delta x_s$	$x_s$ reach	$\delta \Delta m_s$ [ps <sup>-1</sup> ]	$\Delta m_s$ reach	$\Delta m_d$
SM				>14.6 < 31.2 (4)	
World ave.				>12.4(1999) >14.9(2001) (4)	0.464 +/-0.018 (0.486+/-0.015) (3)
Babar					0.507+/- 0.015+/-0.022 (3)
Belle					0.456+/- 0.008+/-0.030 (3)
CDF/D 0				60/22	
BTeV	0.15	Up to 80		38.5(1)	
Atlas		46(6)	0.16 (1) 0.11(6)	38.5(1)	
CMS		42(6)		26(6)	
LHCb		Up to 90 (2)75(6)	0.011(6)	48(6)	

*G. Steinbrueck and S. Hoffman*

- 1) Atlas TDR: <http://atlasinfo.cern.ch/Atlas/GROUPS/PHYSICS/TDR/access.html>
- 2) LHCb technical proposal:  
<http://lhcb-tp.web.cern.ch/lhcb-tp/>
- 3) Duccio Abbaneo
- 4) A. Ali and D. London, Eur. Phys. J. C 18, 665-672 (2001)
- 5) BTev: [http://www-btev.fnal.gov/public\\_documents/btev\\_proposal/index.html](http://www-btev.fnal.gov/public_documents/btev_proposal/index.html)
- 5) B Decays at the LHC, CERN-TH/2000-101 hep-ph/0003238 (1 YEAR of running)