

Probing New Physics in exclusive $b \rightarrow s l^+ l^-$ and $b \rightarrow s \bar{\nu} \nu$ anti- ν decays

Thursday 16 July 2009 17:30 (15 minutes)

The rare decay $B \rightarrow Kl^+ l^-$ gives access to many angular observables that offer new important tests of the Standard Model and its extensions. We present a detailed study of these observables and point out a number of correlations which will allow a clear distinction between different New Physics scenarios. Furthermore, we discuss the decays $B \rightarrow K \bar{\nu} \nu$, $B \rightarrow K \bar{\nu} \nu$ and $B \rightarrow X(s) \bar{\nu} \nu$, which allow a transparent study of Z penguin physics. We study all observables accessible in these decays in the context of the Standard Model and various New Physics models.

Primary authors: BURAS, Andrzej (Technische Universität München); BHARUCHA, Aoife (IPPP, University of Durham); Mr STRAUB, David (Technische Universität München); WICK, Michael (Technische Universität München); BALL, Patricia (IPPP, University of Durham); ALTMANNSHOFER, Wolfgang (Technische Universität München)

Presenter: Mr STRAUB, David (Technische Universität München)

Session Classification: II. Flavour Physics

Track Classification: Flavour Physics