

## Errata

Errata for doctoral thesis Time-dependent  $CP$  violation in  $B^0 \rightarrow \eta_c K_S^0$  decays at the Belle experiment, Alignment of the Belle II detector by Tadeáš Bilka.

Location	Original $\rightarrow$ Corrected
page 62, 2nd par.	<p>In the considered physics model, a new type of <math>Z</math> boson denoted as <math>Z'</math> with effective <math>\bar{s}Z'b</math> couplings would enter via penguin <math>b \rightarrow s</math> contributions. SM-like couplings <math>\bar{q}Z'q</math> are assumed, with vector and axial currents, which have different coupling constants.</p> <p><math>\rightarrow</math></p> <p>In the considered physics model, non-SM effective <math>\bar{s}Zb</math> couplings would enter via penguin <math>b \rightarrow s</math> contributions. SM-like couplings <math>\bar{q}Zq</math> are assumed, with vector and axial currents, which have different coupling constants.</p>
page 348, last par.	<p>Contrary to LHCb, which measures lifetimes relative to <math>\tau_{D^0}</math> ...</p> <p><math>\rightarrow</math></p> <p>Contrary to LHCb, which measures lifetimes relative to <math>\tau_{D^+}</math> ...</p>
page 383	<p>... single-enhanced region ...</p> <p><math>\rightarrow</math></p> <p>... signal-enhanced region ...</p>
page 386, Eq. D.10	$y \rightarrow v$ in the matrix on r.h.s.