

# Electroweak Penguin Decays at LHCb

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The LHCb experiment at the LHC allows a new level of precision in the study of flavour changing neutral currents in the form of  $b \rightarrow s$  or  $b \rightarrow d$  transitions. These electroweak penguin decays are suppressed in the Standard Model, therefore new physics can enter at competing order to the Standard Model physics. I will give a quick introduction to these processes and then mainly focus on the decay  $B_d \rightarrow K^* \mu \mu$ , which has a very rich decay structure and many observables that allow to constrain the physics of or beyond the Standard Model. Furthermore, I'll highlight possible explanations for the so-called " $B_d \rightarrow K^* \mu \mu$  anomaly" which might point to yet unknown physics.