Anomalies in $B$ decays: A sign of new physics?

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At present, there are several measurements of observables in $B$ decays that disagree with the predictions of the Standard Model. These can be separated into two classes of decays, those involving $b \to s \mu^+ \mu^-$ or $b \to c \ell \bar{\nu}_\ell$ transitions. The size of the deviations varies from $\sim 2\sigma$ to $\geq 4\sigma$. We may be seeing signs that new physics (NP) is present in these decays. In this talk, I will review these anomalies, focusing on their dependence (or not) on theoretical input. I will discuss the possible NP explanations, as well as ways of distinguishing these NP models.

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