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## Flavour anomalies and status of indirect probes of the Standard Model

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The Standard Model of particle physics is a remarkably successful and self-consistent theory of the microscopic universe. Nevertheless, profound contradictions between this microscopic world of the Standard Model and astrophysical and cosmological theories describing the macroscopic universe point to a need for a more complete theory. While we have so far failed to directly observe any particles beyond the Standard Model directly in the lab, such particles can be searched for indirectly by precisely measuring Standard Model processes and looking for tell-tale deviations from theoretical predictions induced by new particles and processes. In this talk I will summarise the motivation for, and status of, such indirect tests in quark mixing. As well as a general overview I will describe in detail the so-called “flavour anomalies”, a series of measurements in beauty hadron decays which appear to coherently deviate from Standard Model predictions, and discuss prospects for further indirect probes of the Standard Model in the coming decades.

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