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A Natural extra-dimensional origin for the LHCb anomalies

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The anomalies recently found by the LHCb collaboration in B-meson decays seem to point towards the existence of new physics coupled non-universally to muons and electrons. A beyond-the-Standard-Model dynamics with these features can naturally arise in models with a warped extra-dimension that aim to solve the electroweak Hierarchy Problem. The attractiveness of this set-up is the fact that the dynamics responsible for generating the flavor anomalies is automatically present, being provided by the massive vector resonances. The flavor anomalies can be easily reproduced by assuming that the bottom and muon fields have a sizable amount of compositeness, while the electron is almost elementary. This framework correlates the flavor anomalies to a pattern of corrections in the electroweak observables and in flavor-changing processes.

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