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Global EFT analysis of $b \to c\tau\bar{\nu}_\tau$ anomalies: Updated New Physics Implications

The persistent tensions between experimental measurements and Standard Model predictions in semileptonic $b \to c\tau\bar{\nu}\tau$ transitions provide a compelling motivation to investigate possible new physics contributions. We present recent progress in a global analysis within the Weak Effective Theory (WET), combining exclusive mesonic, inclusive, and baryonic observables. Using updated experimental inputs, including the latest HFLAV averages, we perform one- and two-dimensional fits of vector, scalar, and tensor Wilson coefficients. Our analysis aims to identify viable new physics scenarios and evaluate the implications of current measurements for the interpretation of the $R(D)$ and $R(D^*)$ anomalies.

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