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CP violation and the Unitarity Triangle

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In the Standard Model of particle physics, the Kobayashi-Maskawa mechanism explains CP violation as arising from a single phase in the weak-interaction Lagrangian describing transitions between different quark flavors. This phase information is conveniently parameterized in the complex plane through the Unitarity Triangle (UT), whose interior angles are CP-violating observables that are directly measurable in decays of the B meson. Although this picture has been dramatically confirmed by the B -Factory experiments through precision measurements of the UT angle $\beta(\phi_1)$, several theories of physics beyond the Standard Model predict additional CP-violating phases that could show observable effects in B decays. In this talk I will summarize recent progress in the understanding of CP violation, including recent measurements of the UT angles $\alpha(\phi_2)$ and $\gamma(\phi_3)$ that are beginning to provide non-trivial constraints on possible scenarios of physics beyond the Standard Model.