High Energy Physics - Phenomenology

Unitarity Boomerang

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For the three family quark flavor mixing, the best parametrization is the original Kobayashi-Maskawa matrix, V_{KM}, with four real parameters: three rotation angles $\theta_{1,2,3}$ and one phase δ. A popular way of presentation is by the unitarity triangle which, however, explicitly displays only three, not four, independent parameters. Here we propose an alternative presentation which displays simultaneously all four parameters: the unitarity boomerang.

Comments:	7 pages and 1 figure. One reference added and a few typos corrected
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