

Unraveling the Particle World and the Cosmos at Berkeley—Workshop in Honor of Lawrence Hall and Hitoshi Murayama



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Strong CP and Flavor in Multi-Higgs Theories

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Abstract

The most well-known solutions to the Strong CP problem are arguably axion and Nelson-Barr models. A much lesser known class of solutions involves a simple extension of scalar sector of the Standard Model by at least one additional Higgs doublet. I review my recent work with Professor Hall, in which we develop a mechanism by which a combination of CP and flavor symmetry can simultaneously reproduce the masses, mixings, and CP-violating phase of the CKM matrix while giving sufficiently small contributions to $\bar{\theta}$ that are stable to radiative corrections.

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