Contribution ID: **25**   Type: **not specified**

Modular invariance and the strong CP problem

Thursday, 28 September 2023 11:30 (20 minutes)

We propose a novel solution to the strong CP problem based on modular invariance. The latter is inherent to toroidal compactifications in string theory. We show that modular invariance allows for simple effective theories of flavour and CP where (i) the QCD angle vanishes, (ii) the CKM phase is large, (iii) quark and lepton masses and mixings can be reproduced up to order one coefficients. We implement such a general paradigm in supersymmetry or supergravity, with modular forms or functions, with or without heavy coloured states.

Primary author: TITOV, Arsenii

Presenter: TITOV, Arsenii

Session Classification: Topical Talks