

Probing the composite light scalar of the sextet model for dilaton fingerprints

Wednesday, July 25, 2018 2:20 PM (20 minutes)

The light 0^{++} scalar can be probed for dilaton signatures in near-conformal gauge theories. A case study is presented for the analysis of the $SU(3)$ gauge theory with two fermions in the two-index symmetric representation (sextet model). It is shown that statistical methods which are based on Bayesian Markov Chain Monte Carlo analysis are important for robust tests of dilaton fingerprints in lattice gauge configurations.

Primary authors: Dr WONG, Chik Him (University of Wuppertal); Prof. NOGRADI, Daniel (Eotvos University Budapest - Universidad Autonoma Madrid); KUTI, Julius Kuti (University of California, San Diego); Dr HOLLAND, Kieran (University of the Pacific); Prof. FODOR, Zoltan (University of Wuppertal)

Presenter: Dr WONG, Chik Him (University of Wuppertal)

Session Classification: Physics beyond the Standard Model

Track Classification: Physics Beyond the Standard Model