

Numerical Moduli Stabilisation towards Calabi-Yau Data Exploration

Wednesday, May 22, 2019 5:40 PM (20 minutes)

String compactifications with stabilised moduli and flat directions make it possible to constrain the theory using phenomenological constraints or data. The base geometry typically has many, analytically intractable, moduli fields and flux quanta that characterise the kind of physics which could be explained. Numerical moduli stabilisation will facilitate the connection of Calabi-Yau data, phenomenology and machine-learning of the string theory landscape. We explore the possibility of this by applying nested-sampling algorithms for minimising supergravity potentials.

Primary authors: ABDUSSALAM, Shehu (Shahid Beheshti University); QUEVEDO, Fernando (ICTP and DAMTP); CICOLI, Michele; SHUKLA, Pramod; ABEL, Steven

Presenter: ABDUSSALAM, Shehu (Shahid Beheshti University)

Session Classification: Formal Field Theory and Strings

Track Classification: Formal Field Theory and Strings