Contribution ID: **144** Type: **not specified**

Machine-learning in Calabi-Yau geometry

Wednesday 5 June 2024 09:50 (30 minutes)

Calabi Yau (CY) manifolds are used ubiquitously in string theory. These spaces are central both to string phenomenology and formal developments. While CY manifolds can be constructed in large numbers, and much is known about their topological features, their geometry is still partly enigmatic. In particular, we lack an analytical expression for Ricci-flat metrics on CY n-folds for n>2. In this talk, I will review recent work on obtaining numerical approximations of CY metrics using machine learning, and how such metrics may be used string theory research.

Presenter: LARFORS, Magdalena (Uppsala university, Swedem)