



Contribution ID: 126

Type: 20 minutes talk

Constructing The Standard Model from String Theory

Friday, 17 December 2021 16:15 (30 minutes)

The oldest, and one of the most promising, attempts of connecting string theory to low energy physics has been the compactification of $E_8 \times E_8$ Heterotic string theory on Calabi-Yau 3-folds.

In this talk I will (attempt to) give a pedagogical overview of such constructions, and string model building in general. The talk will then finish with a discussion of recent work, where modern computational methods (specifically reinforcement learning and genetic algorithms) have been applied to finding realistic models within these environments.

<https://inspirehep.net/literature/1906415>

<https://inspirehep.net/literature/1953720>

Could you please give the most relevant category for your talk?

Strings

Will you be pre-recording your talk?

No

Would you be interested in receiving feedback on your presentation?

Yes

Are you happy for your talk to be recorded?

Yes

Primary author: HARVEY, Thomas (University of Oxford)

Co-authors: Dr CONSTANTIN, Andrei (University of Oxford); Prof. ABEL, Steve (University of Durham); Prof. LUKAS, Andre (University of Oxford)

Presenter: HARVEY, Thomas (University of Oxford)

Session Classification: Full-length talks