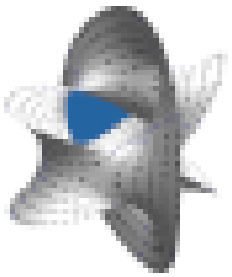

Contribution ID: **30** Type: **not specified**

Exploring heterotic models with reinforcement learning and genetic algorithms

Friday 17 December 2021 18:00 (30 minutes)

We present work applying reinforcement learning and genetic algorithms to string model building, specifically to heterotic Calabi-Yau models with monad bundles. Both methods are found to be highly efficient in identifying phenomenologically attractive three-family models, in cases where systematic scans are not feasible. For monads on the bi-cubic Calabi-Yau either method facilitates a complete search of the environment and leads to similar sets of previously unknown three-family models.

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