

# Exploring the flavour symmetries of heterotic line bundle sum models

*Thursday, 27 June 2024 17:30 (15 minutes)*

Vector bundles made from sums of line bundles have proven to be a particularly fruitful region of the heterotic string landscape, with tens of thousands of models having the exact particle spectrum of the MSSM. A salient feature of these models is their unique and highly constraining  $S(U(1)^N)$  flavour symmetry, which strongly affects low-energy physics. In this talk, we apply genetic algorithms to explore the flavour symmetries of these models, focussing on the quark sector of the MSSM.

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