

## Mirror theorem and shift operators

*Tuesday 7 October 2025 14:00 (1 hour)*

The genus-zero Gromov-Witten invariants of a smooth projective variety can be encoded in an infinite-dimensional Lagrangian submanifold, known as the Givental cone, within the loop space of the cohomology group. A Givental-style mirror theorem states that a certain explicit cohomology-valued hypergeometric series, called the I-function, lies in this Givental cone. In joint work with Coates, Corti and Tseng, we established a Givental-style mirror theorem for toric Deligne-Mumford stacks. In this talk, I will explore the connection between Givental-style mirror theorems and shift operators for equivariant parameters, and I will reframe our results using this perspective. This is partly based on joint work with Fumihiko Sanda.

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