

CATEGORIFIED DONALDSON–THOMAS INVARIANTS OF CALABI–YAU 3-FOLDS
BENJAMIN HENNION

Donaldson–Thomas invariants are numerical invariants associated to Calabi–Yau varieties. They can be obtained by glueing singularity invariants from local models of a suitable moduli space endowed with a (-1) -shifted symplectic structure. By studying the moduli of such local models, we will explain how to recover Brav–Bussi–Dupont–Joyce–Szendroi’s perverse sheaf categorifying the DT-invariants, as well as a strategy for glueing more evolved singularity invariants, such as matrix factorizations. This is joint work with M. Robalo and J. Holstein.