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Open curve counting in CY3

Abstract

I will explain how to invariantly define holomorphic curve counts with Lagrangian boundary conditions, prove the Ooguri-Vafa formula relating knot invariants to curve counts in the conifold, and derive an open “quantum” (i.e. all genus) mirror symmetry for the conifold. Almost no calculations are involved. The results are joint with Tobias Ekholm.