

## (Derived) Deformations of Crepant Curves

*Thursday 21 December 2023 10:00 (50 minutes)*

Motivated by various contraction conjectures, I will describe the full  $A_\infty$  structure associated to a general  $(-3,1)$ -curve  $C$  inside a smooth CY 3-fold. As a corollary, the noncommutative deformation theory of  $C$  can be described as a superpotential algebra derived from what we call free necklace polynomials, establishing a suitably interpreted string theory prediction due to Ferrari, Aspinwall-Katz and Curto-Morrison. This is joint work with Gavin Brown.

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