

Mirror Symmetry and Toric Calabi-Yau Threefolds

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The speaker will describe the mirror pair construction for toric Calabi-Yau threefolds. Mirror symmetry predicts open-closed Gromov-Witten invariants for toric Calabi-Yau threefolds from the B-model. This involves the remodeled B-model using Eynard-Orantin recursion. In particular, he will focus on the case of the affine toric Calabi-Yau three orbifold. The speaker has proved the mirror conjecture in this case (with Prof Chiu-Chu Liu and Zhengyu Zong).