Some attempts to build NCCRs for higher dimensional toric Gorenstein rings

A noncommutative crepant resolution (NCCR) is a nice endomorphism algebra of a sum of modules that "resolves" a normal Gorenstein ring. In the toric context, mirror symmetry suggests that questions surrounding the existence of NCCRs and derived equivalences among them could have geometric answers. In this talk, I will discuss some speculations on a geometric method to construct NCCRs as a quiver algebra for certain toric Calabi-Yau singularities, potentially generalizing results of Bocklandt, Broomhead, Mozgovoy, etc. in dimension 3.