Morita equivalences from Higgsing toric superpotential algebras

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Let A and A' be superpotential algebras of brane tiling quivers, with A' cancellative and A non-cancellative, and suppose A' is obtained from A by contracting, or 'Higgsing', a set of arrows to vertices while preserving a certain associated commutative ring. A' is then a Calabi-Yau algebra and a noncommutative crepant resolution of its prime noetherian center, whereas A is not a finitely generated module over its center, often not even PI, and its center is not noetherian and often not prime. I will present certain Morita equivalences that relate the representation theory of A with that of A'. I will also describe the Azumaya locus of A, and relate it to the Azumaya locus of A'. Along the way, I will introduce the notion of a non-local algebraic variety, and show how this notion is intimately related to these algebras.