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Charlie R Beil* (charlie.beil@bristol.ac.uk), Howard House, Queen's Ave, Bristol, BS8 1SN, United Kingdom. *Nonnoetherian Dimer Algebras and Noncommutative Crepant Resolutions.*

It is known that every cancellative dimer algebra is a noncommutative crepant resolution (NCCR), and every 3-dimensional affine toric Gorenstein singularity admits an NCCR given by a cancellative dimer algebra. However, dimer algebras which are cancellative are quite rare, and we consider the question: how close are nonnoetherian (homotopy) dimer algebras to being NCCRs? To address this question, I will propose a generalization of NCCRs to nonnoetherian tiled matrix rings. I will then describe a class of dimer algebras, as well as a class of noncommutative blowups, which are nonnoetherian NCCRs. (Received July 15, 2016)