1128-16-310 Jonas T Hartwig* (jth@iastate.edu). Categories of modules over noncommutative Kleinian fiber products. Preliminary report.

Six-vertex configurations on a square lattice with semi-periodic twisted boundary conditions turn out to parametrize noncommutative algebras which are deformations of certain fiber products of two type A Kleinian singularities. Examples of such algebras include quotients of the enveloping algebra of the affine Lie algebra $A_1^{(1)}$ and of a finite W-algebra related to \mathfrak{sl}_4 . I will present some results in an ongoing study of the features of the category of weight modules over these algebras, including simple and indecomposable objects, and some results about extensions between simple objects. (Received February 28, 2017)