1167-14-195 Neil Saunders and Arik Wilbert* (arik.wilbert@uga.edu). Exotic Springer fibers and blob algebras.

We study the geometry and topology of a certain family of exotic Springer fibers from an explicit, diagrammatic point of view. These algebraic varieties appear as the fibers under a resolution of singularities of the exotic nilpotent cone which plays a prominent role in Kato's Deligne–Langlands type classification of simple modules for multiparameter Hecke algebras of type C. We describe our results in terms of the combinatorics of the blob algebra. This provides the general framework to construct geometric versions of Khovanov's arc algebra arising from exotic Springer fibers as well as homological invariants for knots and links in a thickened annulus. (Received March 07, 2021)