

1167-05-74

Monica Vazirani* (vazirani@math.ucdavis.edu), Department of Mathematics, One Shields Ave, Davis, CA 95616, and **Kevin Walker**. *Representations of the affine BMW category*. Preliminary report.

The BMW algebra is a deformation of the Brauer algebra, and has the Hecke algebra of type A as a quotient. Its specializations play a role in types B, C, D akin to that of the symmetric group in Schur–Weyl duality. I will discuss Walker’s TQFT-motivated 1-handle construction of a family of representations of the annular BMW category and the resulting representations of the affine BMW algebra. These representations are “integral” and X-semisimple, or calibrated. While the construction is topological, the resulting representation has a straightforward combinatorial description. This is joint work with Kevin Walker. (Received February 16, 2021)