1147-05-823 Monica Vazirani^{*}, Mathematics Department, One Shields Ave, Davis, CA 95616, and Kevin Walker. *Representations of the affine BMW algebra*. 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 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 January 29, 2019)