1151-17-80 Thomas Creutzig, Terry Gannon and Jinwei Yang* (jinwei2@ualberta.ca).

Reconstructing vertex operator algebras from tensor categories of type A.

Tensor product theory for affine Lie algebras, more generally for vertex operator algebras has been studied since 1980s. Many important results such as constructions, Verlinde formula, rigidity and modularity have been obtained for various vertex operator algebras. In this talk, I will present our progress on the Tannaka problems, that is, reconstructing a rational vertex operator algebra such that its tensor category is braided tensor equivalent to a given tensor category arising from affine Lie algebras of type A. This is joint work with T. Creutzig and T. Gannon. (Received August 09, 2019)