

1102-46-212

Brent A Nelson* (bnelson6@math.ucla.edu). *Applications of free monotone transport without a trace.*

In their paper, “Free monotone transport,” Guionnet and Shlyakhtenko solve a free analogue of the Monge-Ampere equation to produce a non-commutative version of Brenier’s monotone transport theorem. One is able to adapt this result to the non-tracial setting, specifically to the context of a free Araki-Woods factor. In this talk, we briefly outline this result and demonstrate two applications: the isomorphism of q -deformed Araki-Woods algebras to free Araki-Woods factors for small $|q|$, and free transport for finite depth subfactor planar algebras. (Received July 29, 2014)