JAMES MINGO, Queen's University

Free compression and Standard Young Tableau

In 1959 H. Kesten found a probability measure whose moments count the number of closed walks on a free group with d generators, now known as the Kesten-McKay law. For non-integer $d \geq 1$ there is still a probability measure but no group, however the $2n^{th}$ moment is still a polynomial of degree n with coefficients in the positive integers; the odd moments being 0. Nica and Speicher showed that the free compression of a Bernoulli random variable has the same law. In this talk we shall show that these moments can also be interpreted in terms of standard Young tableau with specified shape. This is joint work with Iris Arenas Longoria.