

## Tensor Models, from branched polymers to Brownian spheres

*Thursday, March 26, 2015 4:20 PM (50 minutes)*

Ordinary tensor models of rank  $D \geq 3$  are dominated at large  $N$  by tree-like graphs, known as melonic triangulations. We shall show that non-melonic contributions can be enhanced consistently, leading to different types of large  $N$  limits. For instance the most generic quartic tensor model at rank 4, with maximally enhanced non-melonic interactions, displays a branched polymer phase and a 2D quantum gravity phase, and a transition between them whose entropy exponent is positive. This work is in collaboration with V. Bonzom and T. Delepoue.

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