

Probabilistic Operator Algebra Seminar

Organizer: Dan-Virgil Voiculescu

August 30 **Kurusch Ebrahimi-Fard and Nicolas Gilliers**, Norwegian University of Science and Technology and University Greifswald

Title: *Binary trees, operads and Dykema's T-transform*

In this talk we shall discuss an operadic perspective on Dykema's twisted factorization formula for the operator-valued T-transform. We will explain how this approach permits to connect the factorization formula for the T-transform to a certain distributivity property in the context of operads with multiplication and associated combinatorial Hopf algebras. We will also address the question of how this approach may be used to better understand properties of the T-transform in the operator-valued setting.