19th Workshop: Noncommutative Probability, Noncommutative Harmonic Analysis and Related Topics with Applications, 31.07-6.08.2022, Bďž″dlewo

ABSTRACT

Vitonofrio Crismale (Department of Mathematics, University of Bari) **Tail algebras on monotone and** *q***-deformed exchangeable stochastic processes Abstract**:

The talk is mainly focused on the tail algebras of exchangeable monotone stochastic processes. Their structure allows to prove the analogue of de Finetti's theorem: exchangeability for sequences of random variables is equivalent to conditional *i.i.d.* with respect to the tail algebra.

In addition, since the vacuum state on the q-deformed C^* -algebra is the only exchangeable state when |q| < 1, in the second part of the talk I will present its tail algebra as obeying a zero-one law. Finally, if time permits, I will say few words on the failure of Hewitt-Savage theorem and Olshen theorem in this case.

The talk is based on joint work with Stefano Rossi.