Speaker: Simone Floreani

Title: Self-duality in the continuum

Abstract: We generalize the notion of self-duality beyond the framework of lattice systems. Our results are formulated as two self-intertwining relations for consistent particle systems: one related to falling factorial polynomials (classical self-dualities), the other one to generalized Charlier/Meixner polynomials and multiple-stochastic integrals (orthogonal self-dualities). Relevant examples include systems of sticky Brownian motions, free Kawasaki dynamics in the continuum and a generalized inclusion process in the continuum.

Based on a joint (ongoing) work with S. Jansen (LMU Munich), F. Redig (TU Delft) and S. Wagner (LMU Munich).