

February

Infinite Loops and the Bose Gas

SPEAKER: Quirin Vogel, NYU Shanghai

TIME: 5:00pm-6:00pm, Thursday, February 25, 2021

VENUE: Via Zoom (Members of NYU Shanghai Community
can join from Room 613 at Pudong campus)

ABSTRACT

The occurrence of "infinite loops" in the probabilistic description of the Bose gas has been the subject of intense research. In this talk we motivate the Bose gas from a quantum mechanical/functional analytic description and introduce its probabilistic representation as a loop soup. We show how random interacements naturally arise from the finite volume representation in certain regimes. No prior knowledge of the Bose gas nor loop soups is required.

BIOGRAPHY

Prior to joining NYU Shanghai as a Faculty Fellow of Mathematics in 2020, Quirin completed his PhD at the University of Warwick. His research interests include but are not limited to: loop soups/percolation, random walks, lattice field and interacting particle systems.



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