Abstract: "Extremes of the supercritical Gaussian Free Field"

We show that the rescaled maximum of the discrete Gaussian Free Field (DGFF) in dimension larger or equal to 3 is in the maximal domain of attraction of the Gumbel distribution. A finer description of the maximum can also be obtained, that is, the associated extremal process converges to a Poisson point process. These results holds both for the infinite-volume field as well as the field with zero boundary conditions. The proofs follow from an interesting application of the Stein-Chen method from Arratia et al. (1989).

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