



## Institut für Optimierung und Diskrete Mathematik

## Vortrag im Seminar Diskrete Mathematik und Optimierung

Donnerstag 18.12.2014, 10:15

Hörsaal AE01, Steyrergasse 30, Erdgeschoß

## Correlation decay in the random graph coloring problem

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Based on non-rigorous but sophisticated considerations, physicists have put forward predictions on the probabilistic nature of classical problem in combinatorics such as the random graph coloring problem. The key object of interest from the physics point of view is the Boltzmann distribution. In the case of random graph coloring, this is just the uniform distribution on the set of all k-colorings of the graph. In this talk I will investigate the spatial mixing properties of the Boltzmann distribution of the random graph G(n, d/n).

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