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Examples of universality in two-dimensional percolation

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Abstract

Universality appears naturally both within the Renormalization Group and the SLE approach to critical phenomena. Now that the conformally invariant scaling limits of several two-dimensional lattice models have been understood rigorously, arguably one of the most interesting open problems in the field is to provide proofs of the universal behavior of critical models. I will give some examples by looking at percolation models generated by certain cellular automata (joint work with Chuck Newman and Vladas Sidoravicius) and at bootstrap and enhancement percolation.