

Mathematics Colloquium



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An invitation to FK percolation

In the last decades, FK percolation established itself as a central model within statistical mechanics, both for its relation to other models as well as for its intrinsic behavior. This talk will mostly be dedicated to FK-percolation on the square lattice Z^2 and will specifically touch on the sharpness of the phase transition, its continuity/discontinuity and properties of the critical phase. If time permits, we will explore the connection between FK-percolation and the six-vertex model and sketch an approach to proving a GFF scaling limit for the height-function associated to the latter.