# Embedding Percolation

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Percolation is concerned with the existence of an infinite path in a random subgraph of a given graph H. We can rephrase this as the existence of an injective graph homomorphism (or an injective 1-Lipschitz map) from the infinite line Z+ to the random subgraph. What happens if we replace Z+ with another graph G? Answering this for various choices of G and H will lead us to a surprising range of topics, including topological combinatorics, first-passage percolation, and queueing theory. Based on joint works with Dirr, Dondl, Grimmett, Martin and Scheutzow.