## Alexander Holroyd UBC and Microsoft Research Multi-dimensional percolation

Percolation is concerned with the existence of an infinite path in a random subgraph of the lattice  $Z^D$ . We can rephrase this as the existence of a Lipschitz embedding of the infinite line Z into the random subgraph. What happens if we replace the line Z with another lattice  $Z^d$ ? I'll answer this for all values of the two dimensions d and D, and the Lipschitz constant. Based on joint works with Dirr, Dondl, Grimmett and Scheutzow.