Abstract:

Recently, the "information percolation" framework was introduced as a way to obtain sharp estimates on mixing for spin systems at high temperatures, and in particular, to establish cutoff for the Ising model in three dimensions up to criticality from a worst starting state. I will describe how this method can be used to understand the effect of different initial states on the mixing time, both random ("warm start") and deterministic.

Joint work with Allan Sly.