

# LARGE DEVIATIONS AND DISCONNECTION FOR RANDOM INTERLACEMENTS

ALAIN-SOL SZNITMAN

In this talk I will describe results obtained in two recent articles in collaboration with Xinyi Li concerning large deviations for the occupation-time profile in a large box of  $Z^d$ ,  $d \geq 3$ , for random interlacements at a given level, and the probability that random interlacements disconnect a macroscopic body from infinity, when the vacant set is in the percolative regime.