



# THE UNIVERSITY OF CHICAGO

Department of Statistics

## DISSERTATION PRESENTATION AND DEFENSE

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Random Walk Among Bernoulli Obstacles

THURSDAY, April 30, 2020, at 3:00 PM  
ZOOM Meeting

### ABSTRACT

Place an obstacle with probability  $1 - p$  independently at each vertex of  $\mathbb{Z}^d$  and consider a simple symmetric random walk that is killed upon hitting one of the obstacles. This is called random walk among Bernoulli obstacles. The most prominent feature of this model is a strong localization effect: the random walk will be localized in a very small region conditional on the event that it survives for a long time. In this talk, we will discuss some recent results about the behaviors of the conditional random walk, in quenched, annealed, and biased settings.