S4F4 - Graduate Seminar on Stochastic Models

(Preliminary) schedule

Date	Topic	Speaker
04/14/26		
04/21/26		
04/28/26		
05/05/26		
05/19/26		
06/09/26		
06/16/26		
06/23/26		
06/30/26		
07/07/26		
07/14/26 (?)		

Content

In the seminar we will see some stochastic models, which can be interpreted as interacting particles or spin systems, which could span from the exclusion process, voter model, the contact process or percolation. We will study some properties of such processes, such as conditions for non-trivial stationary distributions or phase transitions.

Background

Ideally one should have taken the Markov Process lecture. Some topics can be also presented with the Stochastic Processes lecture. In particular, I will prepare the final list of topics once I know the background of the students (for instance, how many already have taken the Markov Processes lecture).

Literature

- Durrett: Lecture notes of the Summer School of Saint-Flour, see https://sites.math.duke.edu/~rtd/reprints/paper85.pdf
- Liggett: Continuous Time Markov Processes: An Introduction.

Preliminary meeting (Vorbesprechung)

Thursday, 29th of January, Room N0.007,14:15

In case you would like to participate but you can not make, send me an email ahead of the meeting.