

Chiara Franceschini

Instituto Superior Técnico - U. Lisboa

MSRI Postdoc (8/16 - 12/17) Office 303

5 minutes talk

9/30/2021, Berkeley

REF. On the notion(s) of duality for Markov processes
by Sabine Jansen and Noemi Kurt (2014)

ALGEBRAIC APPROACH

Inspired by quantum mechanics the idea is to write the Markov generators in terms of (quantum) Lie algebra generators...

Multi species ASEP?

Duality theory for Markov Processes

APPLICATIONS

- Study of correlations for the initial model
- Boltzmann-Gibbs principle
- Other replacement lemmas for scaling limit?

DIFFERENT (and new) AREAS

- Interacting Particle System
- Population genetics
- Redistribution models ^{open} Asympt. KMP?
- Chemical Reaction Networks?