

## **Abstract**

These notes are based on lectures given at University of Nantes in 2018. Standard references for population dynamics are

- Stochastic models for Structured Populations Bansaye and Méléard [1]
- Markov Processes Ethier and Kurtz [2]
- Tom Britton, Etienne Pardoux, Stochastic epidemics in a homogeneous community, <https://arxiv.org/abs/1808.05350>
- Donald Dawson, Introductory Lectures on Stochastic Population Systems, <https://arxiv.org/abs/1705.03781>

The basic reference for convergence of Markov processes is the book by Ethier and Kurtz Ethier and Kurtz [2].