Lecture on July 30th, 2019 Birth and Death Process

1 Pure Death Process (See Chap 6.2)

• Example: Linear Death Process.

2 Birth and Death Process (See Chap 6.3)

- Definition of birth and death process in terms of continuous time Markov process.
- Definition of infinitesimal generator for birth and death process.
- Chapman-Kolmogorov Equation.
- Sojourn time for birth and death process.
- \bullet Backward Kolmogorov Equation and Forward Kolmogorov Equation.