

Continuous-time modelling

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Overview of lecture

- Overview of continuous-time vs discrete-time modelling.
- One species continuous-time models.
- Steady states and phase plane analysis.
- Linear stability analysis.
- Predator-prey models.
- Parameter sensitivity and bifurcation analysis.
- Infectious diseases modelling.
- Example of modelling in Python (more details in MATH0011 Mathematical Methods II).