Life as a manifestation of dynamical systems

Every biological system is governed by physical laws
Every physical system changes over time
The change of dynamical systems can be described, in approximation, with math:

Oridnary Differential Equations (ODEs)

We will simulate the dynamics of biological systems using ODEs.

1. Guest lectures by Professor Louis – Calculus reminder
2. A Scipy function "`solve_ivp`"
3. Examples of simulation of biological systems using "`solve_ivp`"

Working knowledge of Numpy is required.

Cf) "`solve_ivp`" is a recent replacement of an older function "`odeint`". Both work well in our classes.