Info

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is written (completely with human hands) by Rupadarshi Ray,
created on March 29, 2024 5:33:35 PM,
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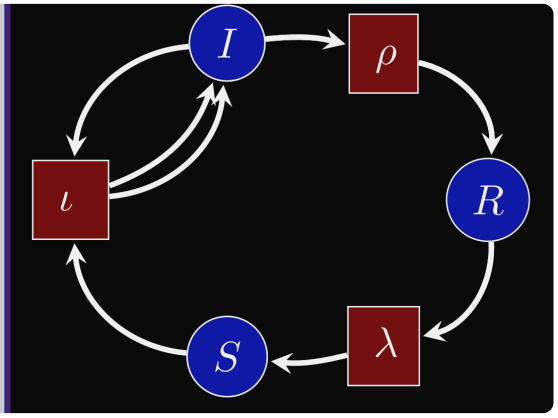
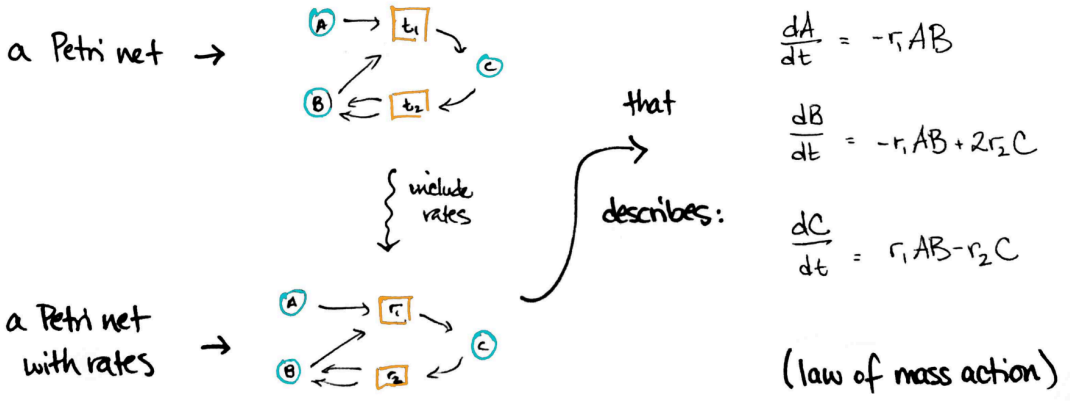
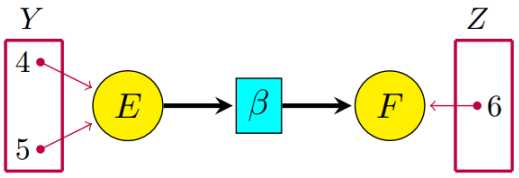
Graph $\to$ polynomial ODE

- petri nets without open ends, *autonomous*
  - $$\frac{dS}{dt} = r_\lambda R - r_\iota SI$$
    $$\frac{dI}{dt} = r_\iota SI - r_\rho I$$
    $$\frac{dR}{dt} = r_\rho I - r_\lambda R.$$

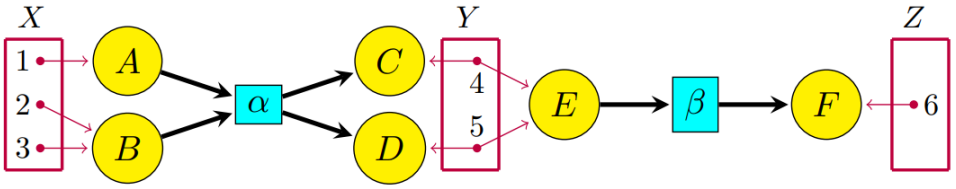




  - [1]
- open petri nets



To compose them, the first step is to put the pictures together:



- [2]

Current note has 0 direct children and 0 total descendants.

- stamp stamp
  - Rf subobjects of and functions on $\mathbb{R}^n, T^n, S^n, \mathbb{C}^n$
    - Vec ODEs in $\mathbb{R}^n \leftrightarrow$ Vector fields in $\mathbb{R}^n$
      - from graphs Graph $\to$ polynomial ODE

And it has 10 siblings.

- stamp stamp
  - Rf subobjects of and functions on $\mathbb{R}^n, T^n, S^n, \mathbb{C}^n$
    - Vec ODEs in $\mathbb{R}^n \leftrightarrow$ Vector fields in $\mathbb{R}^n$
      - cons Constant of a flow in $\mathbb{R}^n$
      - Euler method Euler's iterative solution method for first order ODEs
      - existence Existence of integral curves of vector fields in $\mathbb{R}^n$
      - fixed Fixed points
      - flows Flow of a vector field in $\mathbb{R}^n$
      - from graphs Graph $\to$ polynomial ODE
      - grad Gradient flows on $\mathbb{R}^n$
      - Hamiltonian Hamiltonian vector fields in $\mathbb{R}^{2n}$ with standard symplectic form
      - probability distribution Probability distribution of flow
      - volume Volume change by flows on $\mathbb{R}^n$

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1. What is Applied Category Theory? (arxiv.org) ↩
2. 1704.02051.pdf (arxiv.org) ↩