

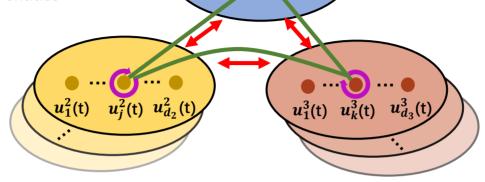
: Edges defined by observed interaction (i, j, k)

: Diffusion process along edges

: Reaction process on individual entities

Table of observed data

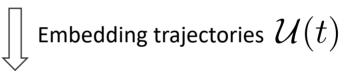
Type 1	Type 2	Type 3	Time- stamp	Value
i	j	k	t	$y_{ijk}(t)$



 $u_1^1(t)$ $u_i^1(t)$ $u_{d_1}^1(t)$

Time trajectory

Neural
Diffusion-Reaction
Process, Eq (4)



Neural Network, Eq (5)

Type 1

Gaussian noise model

Data: Interaction results at various timestamps