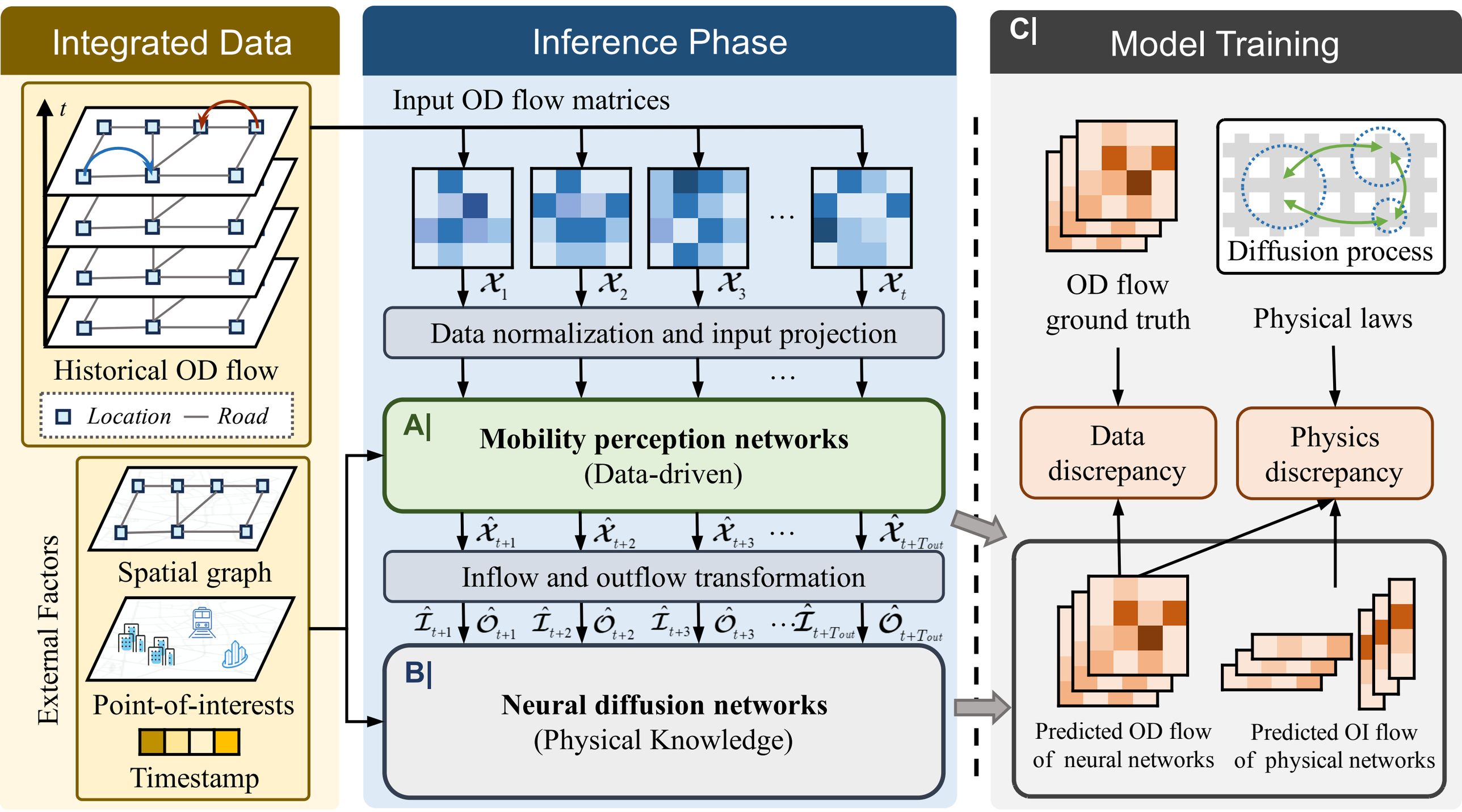
Integrated Data
Historical OD flow
Location
Road
External Factors
Spatial graph
Point-of-interests
Timestamp
Inference Phase
Input OD flow matrices
Data normalization and input projection
A|
Mobility perception networks
(Data-driven)
Inflow and outflow transformation
B|
Neural diffusion networks
(Physical Knowledge)
C|
Model Training
OD flow
ground truth
Diffusion process
Physical laws
Data
discrepancy
Physics
discrepancy
Predicted OD flow
of neural networks
Predicted OI flow
of physical networks