

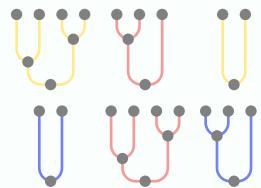
## Simulation

## Full Dataset

## Model Training

## Per-Scenario Performance

Output



● PD ● ED ● NND

Settings

Low Complexity:

$$\lambda_0 \quad \mu_0$$

Scenarios:

PD ED NND

Medium Complexity:

$$\lambda_0 \quad \mu_0 \quad \beta_N \quad \beta_\Phi$$

Scenarios:

PD ED NND

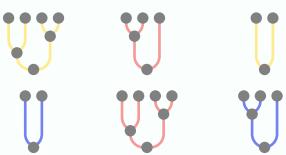
High Complexity:

$$\lambda_0 \quad \mu_0 \quad \beta_N \quad \beta_\Phi \quad \gamma_N \quad \gamma_\Phi$$

Scenarios:

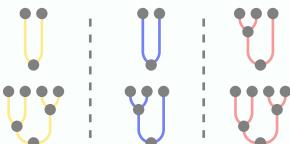
PD ED NND

All Trees



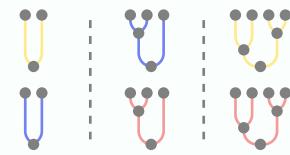
By Scenario

PD ED NND



By Tree Size

Small Medium Large



Regressors

GNN

LSTM

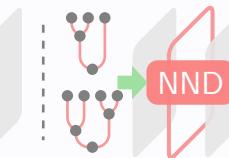
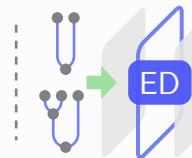
Phylo Trees

Branching Times

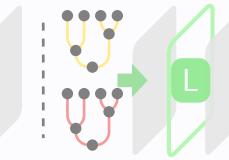
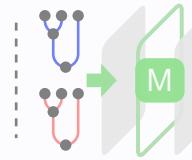
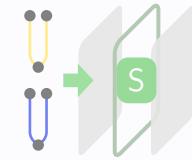
Classifiers

GNN

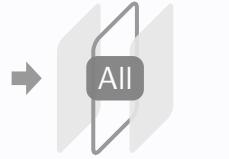
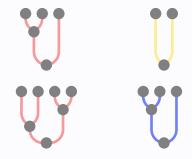
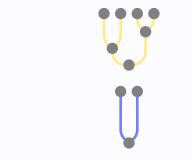
LSTM



Per-Size Performance



General Performance



Model Misspecification

