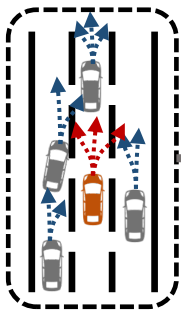


RHINO: Hypergraph-based Interaction Relational Reasoning for Motion Generation

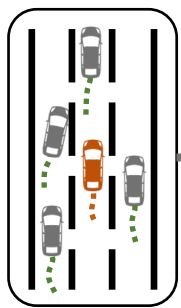
Input:
Multi-modal Trajectory

$$\hat{\mathbf{X}}_{T+1:T+F} \in \mathbb{R}^{N \times 3 \times F \times 2}$$



Input:
Historical States

$$\mathbf{X}_{1:T} \in \mathbb{R}^{N \times T \times 2}$$

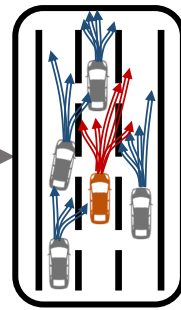


Future
Hypergraph
Relational
Encoder

Posterior
Distribution
Learner

Motion
Generator

Historical
Hypergraph
Relational
Encoder



Output:
Trajectory Generation

$$\hat{\mathbf{Y}}_{T+1:T+F}^K \in \mathbb{R}^{N \times K \times F \times 2}$$