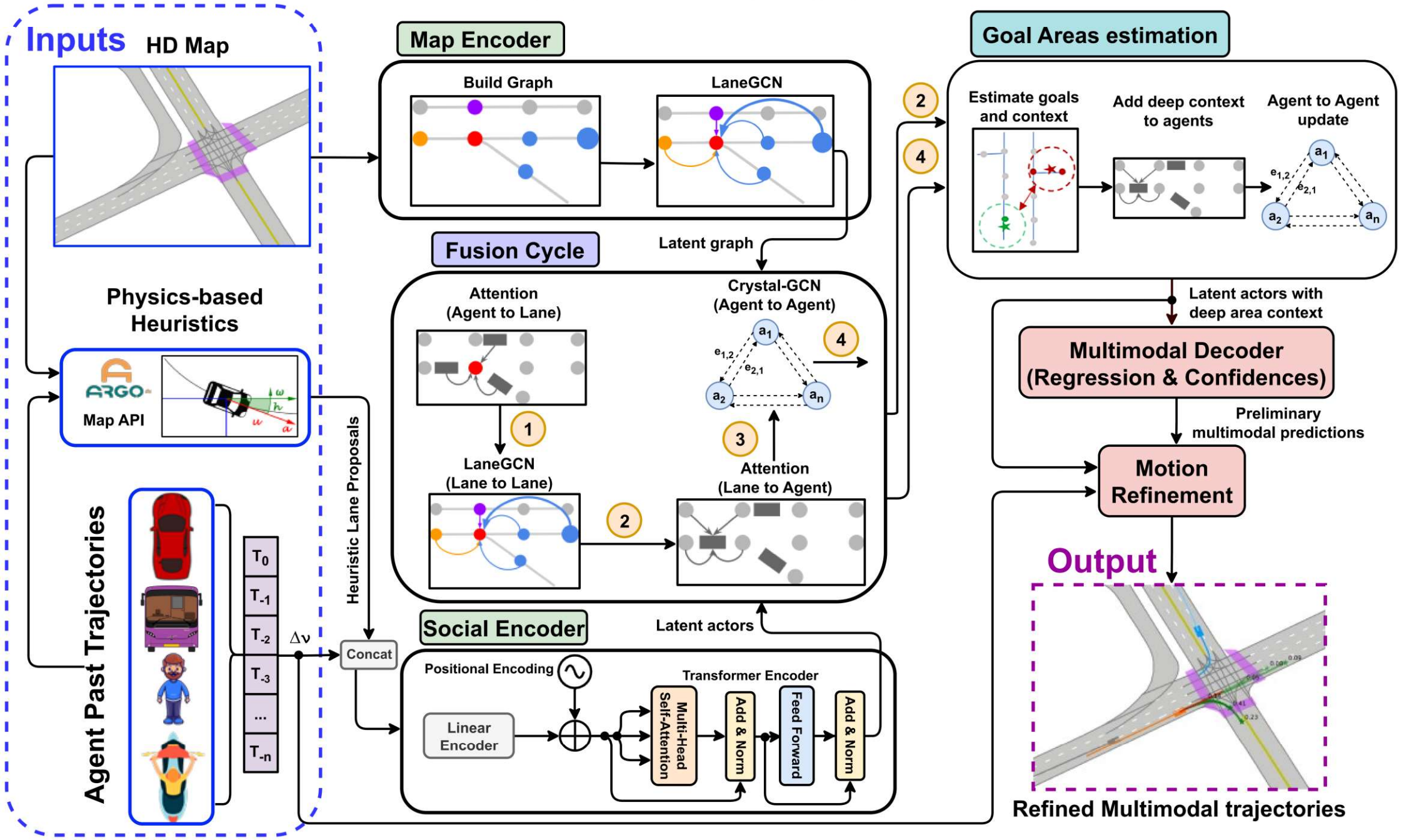
Inputs
HD Map
Physics-based Heuristics
ARGO
Map API
Agent Past Trajectories
T0
T-1
T-2
T-3
...
T-n
Δν
Heuristic Lane Proposals
Concat
Map Encoder
Build Graph
LaneGCN
Latent graph
Fusion Cycle
Attention (Agent to Lane)
LaneGCN (Lane to Lane)
Crystal-GCN (Agent to Agent)
Attention (Lane to Agent)
1
2
3
4
Social Encoder
Latent actors
Positional Encoding
Linear Encoder
Transformer Encoder
Multi-Head Self-Attention
Add & Norm
Feed Forward
Add & Norm
Goal Areas estimation
Estimate goals and context
Add deep context to agents
Agent to Agent update
Latent actors with deep area context
Multimodal Decoder (Regression & Confidences)
Preliminary multimodal predictions
Motion Refinement
Output
Refined Multimodal trajectories