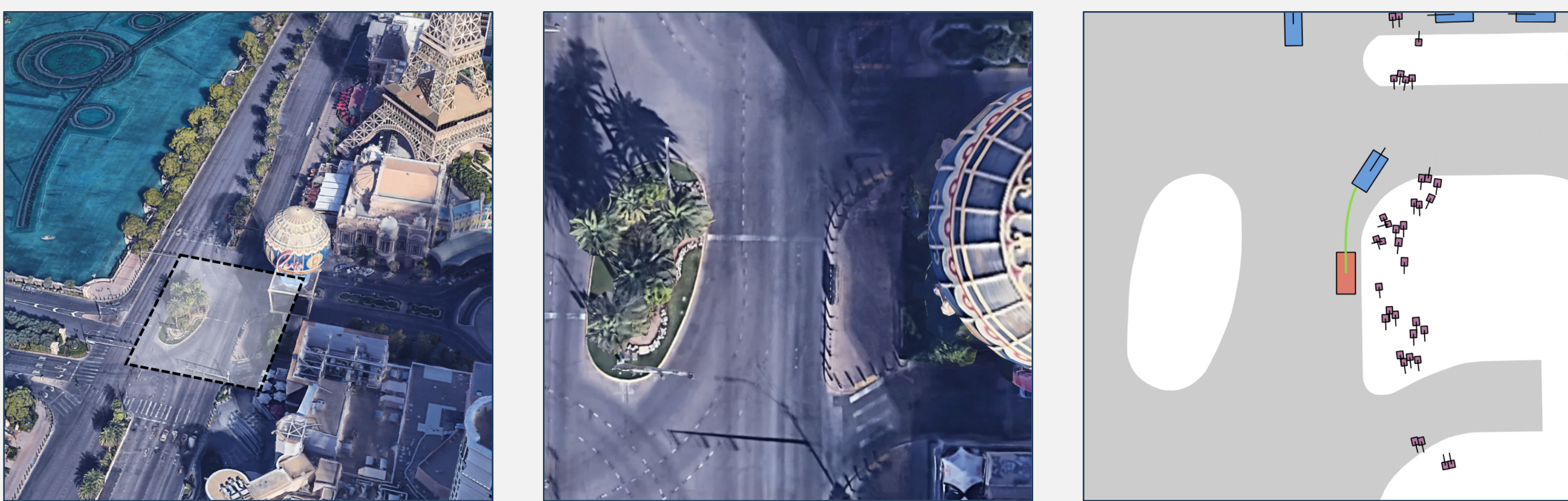


Common Misconceptions in Vehicle Motion Planning

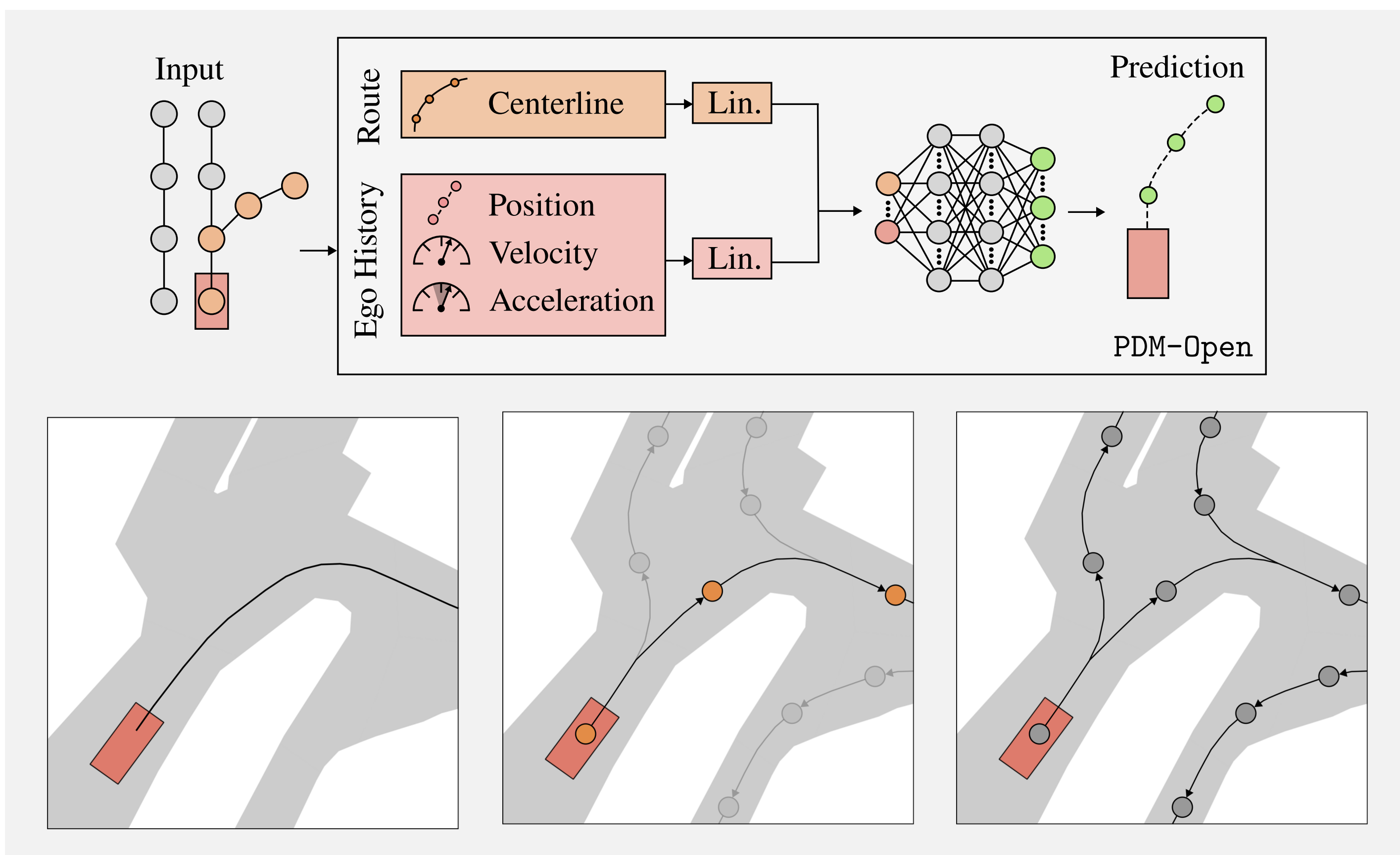


Daniel Dauner^{1,2}, Marcel Hallgarten^{1,3}, Andreas Geiger^{1,2}, and Kashyap Chitta^{1,2}
¹University of Tübingen, ²Tübingen AI Center, ³Robert Bosch GmbH

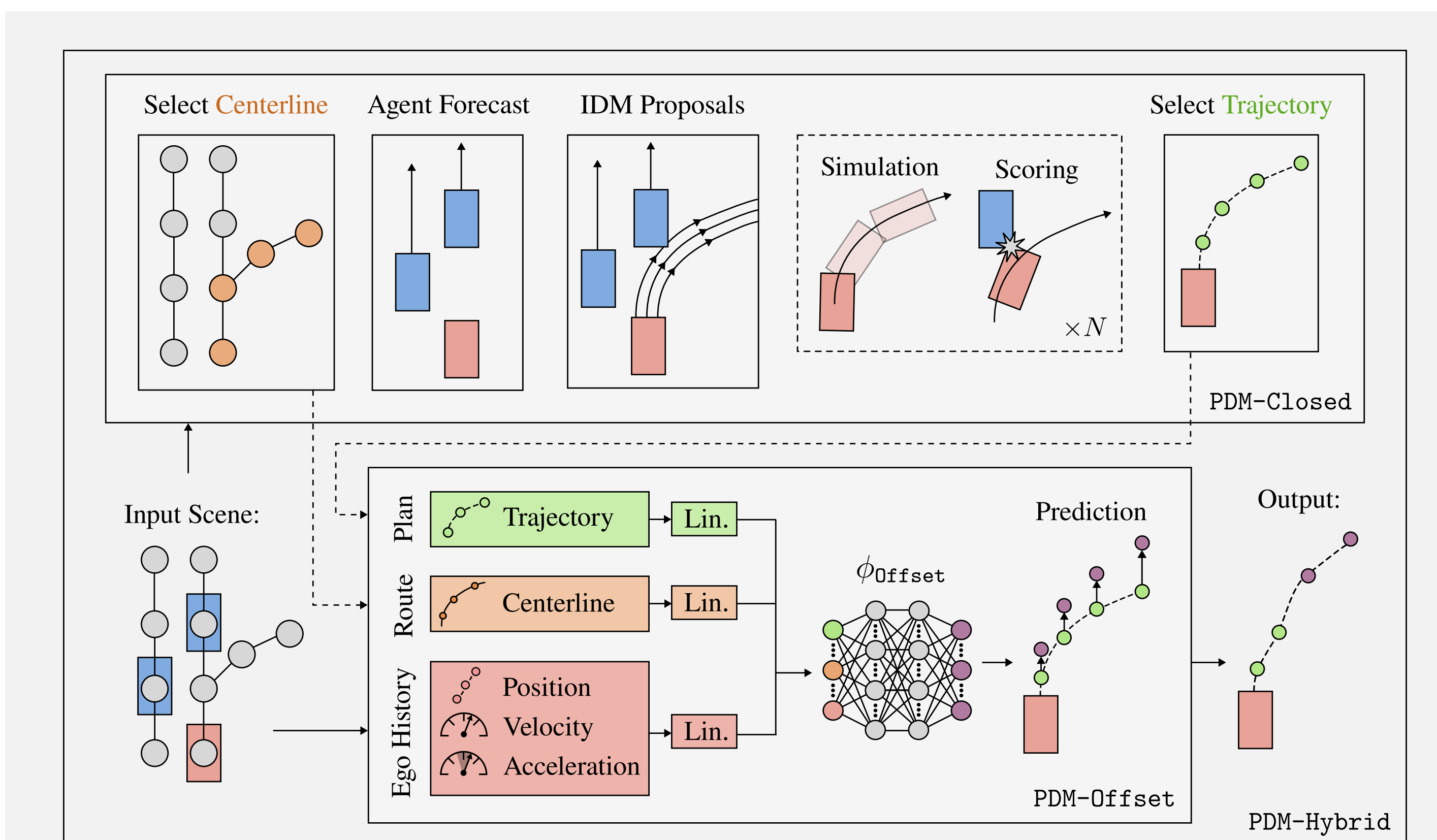
nuPlan Challenge: Data-Driven Simulation



Centerline-Conditioned Learned Ego-Forecasting



Combining Learned and Rule-Based Planning



Method	Repr.	Open-Loop	Closed-Loop
PlanCNN	Map+Agents (Raster)	64	73
Urban Driver	Map+Agents (Polygon)	76	44
PDM-Open	Centerline	86	54
PDM-Closed	Centerline+Agents	44	92
PDM-Hybrid	Centerline+Agents	84	92

#1. A route centerline is all you need

#2. Rule-based beat learned planners in closed-loop driving

#3. The planning and ego-forecasting task are misaligned