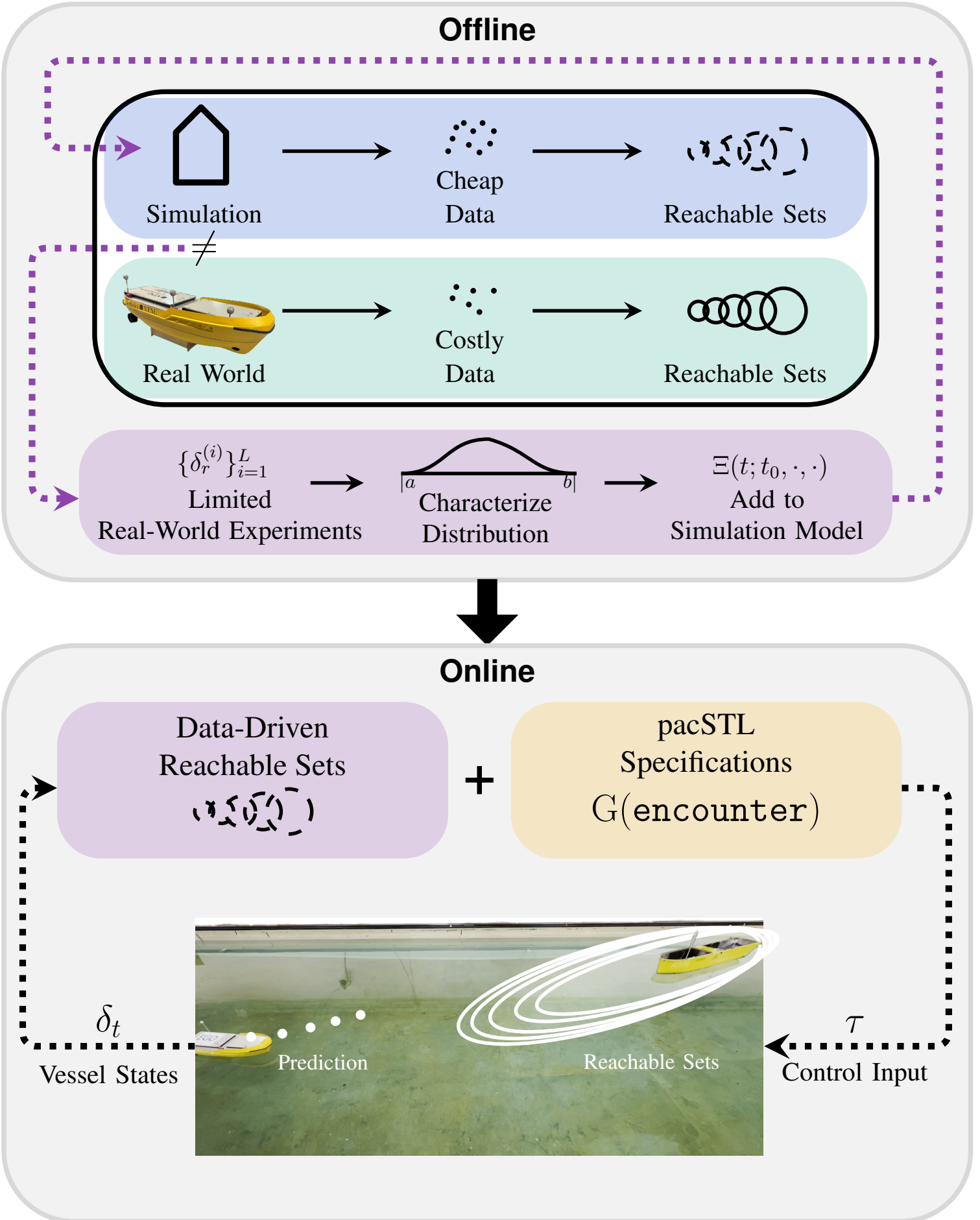
Offline
Simulation
Cheap Data
Reachable Sets
≠
Real World
Costly Data
Reachable Sets
$\{\delta_r^{(i)}\}_{i=1}^{L}$
Limited Real-World Experiments
a
b
Characterize Distribution
$\Xi(t; t_0, \cdot, \cdot)$
Add to Simulation Model
Online
Data-Driven Reachable Sets
+
pacSTL Specifications
G(encounter)
δ_t
Vessel States
Prediction
Reachable Sets
τ
Control Input