ICRA 2025: Adaptive Safety Margins for Path Planning
Comparison of Naive, Conservative, and Learnable CP Methods

Naive (No Margin) | **Conservative (Fixed 0.5m)** | **Adaptive (Learnable CP)**

Parking Lot — Naive: Length: 112.8m, Clearance: 3.63m; Conservative: Length: 102.8m, Clearance: 3.92m; Adaptive: Length: 108.8m, Clearance: 3.92m

Narrow Corridor — Naive: Length: 96.4m, Clearance: 3.03m; Conservative: Length: 196.8m, Clearance: 2.43m; Adaptive: Length: 132.0m, Clearance: 3.44m

Maze — Naive: Length: 184.8m, Clearance: 1.87m; Conservative: Length: 165.2m, Clearance: 2.95m; Adaptive: Length: 213.2m, Clearance: 2.62m

Cluttered Warehouse — Naive: Length: 432.8m, Clearance: 2.53m; Conservative: Length: 1030.8m, Clearance: 2.26m; Adaptive: Length: 565.2m, Clearance: 2.61m