Benchmark models with JuMP and OptimalControl max iter = 1000, tol = 1.0e-8, constr viol tol = 1.0e-6, solver = ma57Model Discretization Total Time JuMP Total Time OC Iterations JuMP Iterations OC Allocations JuMP(1e6) Allocations OC(1e6) 0.02 steering 100 0.0511 4.3 9.4400 0.080.218.053.8 steering 500 0.222.1 67.2steering 0.111000 0.4444.4 141.1 steering 0.2818 26.5rocket100 0.050.19.9 79 rocket400 0.245.12 39.3410.8 rocket500 0.538.78 50.3 484.4 27.07 54 700.5 rocket1000 0.3697.20.035.6 chain 100 0.013.4 chain 400 0.020.08 13.4 24.7 chain 51.2 500 0.050.1616.9chain 1000 0.07 0.1734.0 48.3 electrical\_vehicle 21.0 100 0.010.0616 electrical\_vehicle 400 0.69 103.4 0.0110.6

1000

370

13.3

27.3

4001.5

4195.1

electrical vehicle

electrical\_vehicle

500

1000

0.05

13.78

40.28