```
                              ◇ OCP ◇
```

Phase transitions

Phase #0

| CONTINUOUS

Phase #1

Phase #0

nlp_node_0

Time
Size: 2
Scaling: [1.000 1.000]
Initial guess: [1.296 0.193]
Min bound: [1.046 -0.057]
Max bound: [1.546 0.443]

Lagrange
$(MINIMIZE\_STATE)^2$
Weight: 1
key: qdot
Index in list: 0

$(MINIMIZE\_STATE)^2$
Weight: 10
key: q
Index in list: 4

$(MINIMIZE\_STATE)^2$
Weight: 100
key: q
Index in list: 5

Mayer
$(MINIMIZE\_MARKERS)^2$
Weight: 10
reference_jcs: 0
marker_index: 6
Index in list: 1
Shooting nodes index: Node.ALL_SHOOTING

$(MINIMIZE\_MARKERS)^2$
Weight: 10
reference_jcs: 0
marker_index: 11
Index in list: 2
Shooting nodes index: Node.ALL_SHOOTING

MINIMIZE_MARKERS
Weight: 10
reference_jcs: 0
marker_index: 16
Index in list: 3
Shooting nodes index: Node.ALL_SHOOTING

MINIMIZE_ANGULAR_MOMENTUM
Weight: 100000
Index in list: 6
Shooting nodes index: Node.START

$(MINIMIZE\_ANGULAR\_MOMENTUM)^2$
Weight: 1000
Index in list: 7
Shooting nodes index: Node.START

MINIMIZE_ANGULAR_MOMENTUM
Weight: 100000
Index in list: 8
Shooting nodes index: Node.START

$(MINIMIZE\_ANGULAR\_MOMENTUM)^2$
Weight: 1000
Index in list: 9
Shooting nodes index: Node.START

MINIMIZE_TIME
Weight: 1e-06
min_bound: 1.0461452370659663
max_bound: 1.5461452370659663
Index in list: 10
Shooting nodes index: Node.END

Constraints
No constraint set

Phase #1

nlp_node_1

Time
Size: 2
Scaling: [1.000 1.000]
Initial guess: [1.296 0.193]
Min bound: [1.046 -0.057]
Max bound: [1.546 0.443]

Lagrange
$(MINIMIZE\_STATE)^2$
Weight: 1
key: qdot
Index in list: 0

$(MINIMIZE\_STATE)^2$
Weight: 10
key: q
Index in list: 4

$(MINIMIZE\_STATE)^2$
Weight: 100
key: q
Index in list: 5

Mayer
$(MINIMIZE\_MARKERS)^2$
Weight: 10
reference_jcs: 0
marker_index: 6
Index in list: 1
Shooting nodes index: Node.ALL_SHOOTING

$(MINIMIZE\_MARKERS)^2$
Weight: 10
reference_jcs: 0
marker_index: 11
Index in list: 2
Shooting nodes index: Node.ALL_SHOOTING

MINIMIZE_MARKERS
Weight: 10
reference_jcs: 0
marker_index: 16
Index in list: 3
Shooting nodes index: Node.ALL_SHOOTING

$(MINIMIZE\_STATE - [0.000\ 0.000\ 0.000\ ])^2$
Weight: 0.1
key: q
Index in list: 6
Shooting nodes index: Node.END

$(MINIMIZE\_STATE - 11.977\ )^2$
Weight: 0.1
key: q
Index in list: 7
Shooting nodes index: Node.END

$(MINIMIZE\_STATE - 0.000\ )^2$
Weight: 0.1
key: q
Index in list: 8
Shooting nodes index: Node.END

$(MINIMIZE\_STATE - 12.566\ )^2$
Weight: 0.1
key: q
Index in list: 9
Shooting nodes index: Node.END

MINIMIZE_TIME
Weight: 1e-06
min_bound: -0.05687500000000001
max_bound: 0.443125
Index in list: 10
Shooting nodes index: Node.END

Constraints
No constraint set