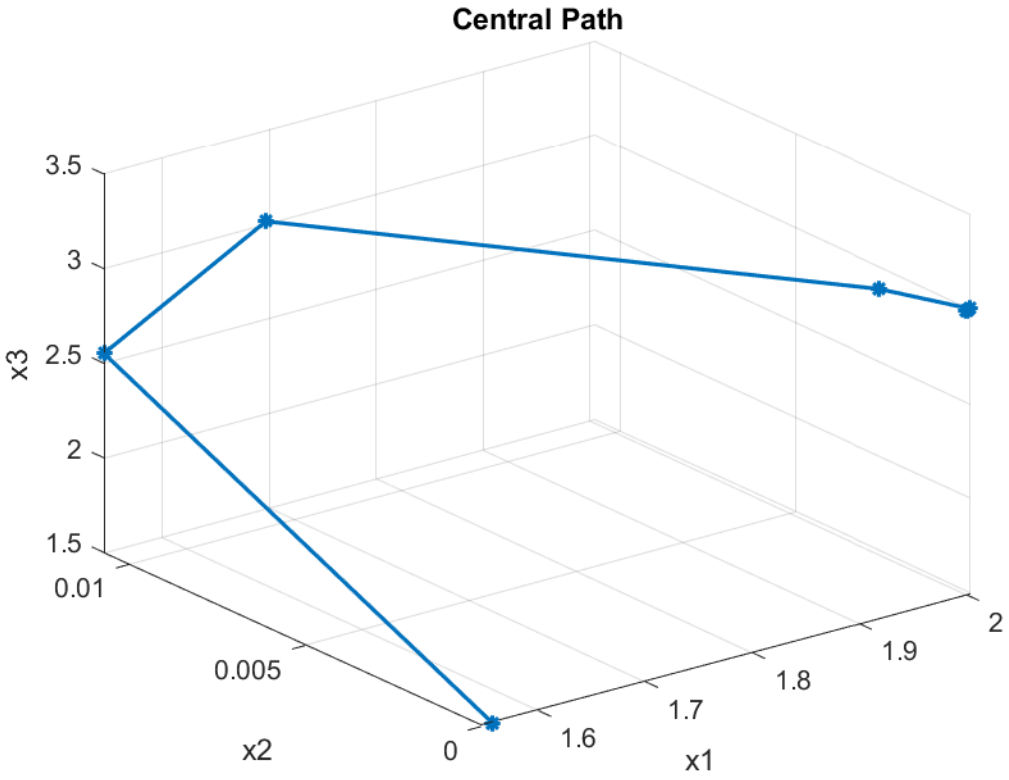
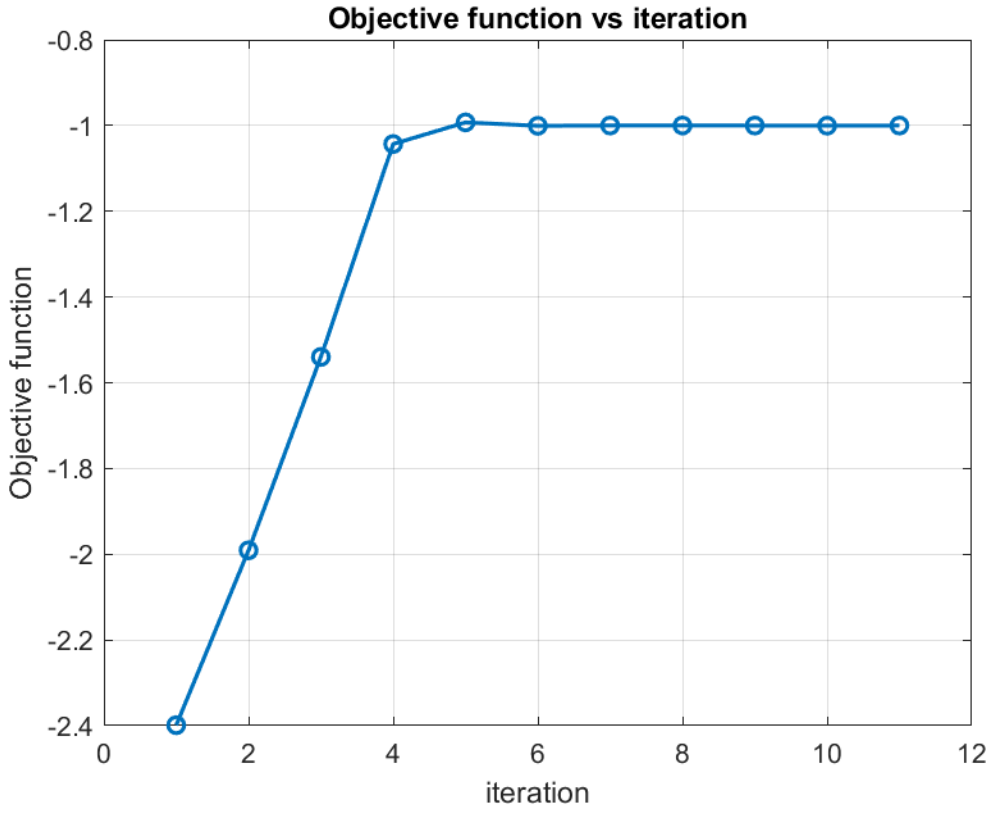
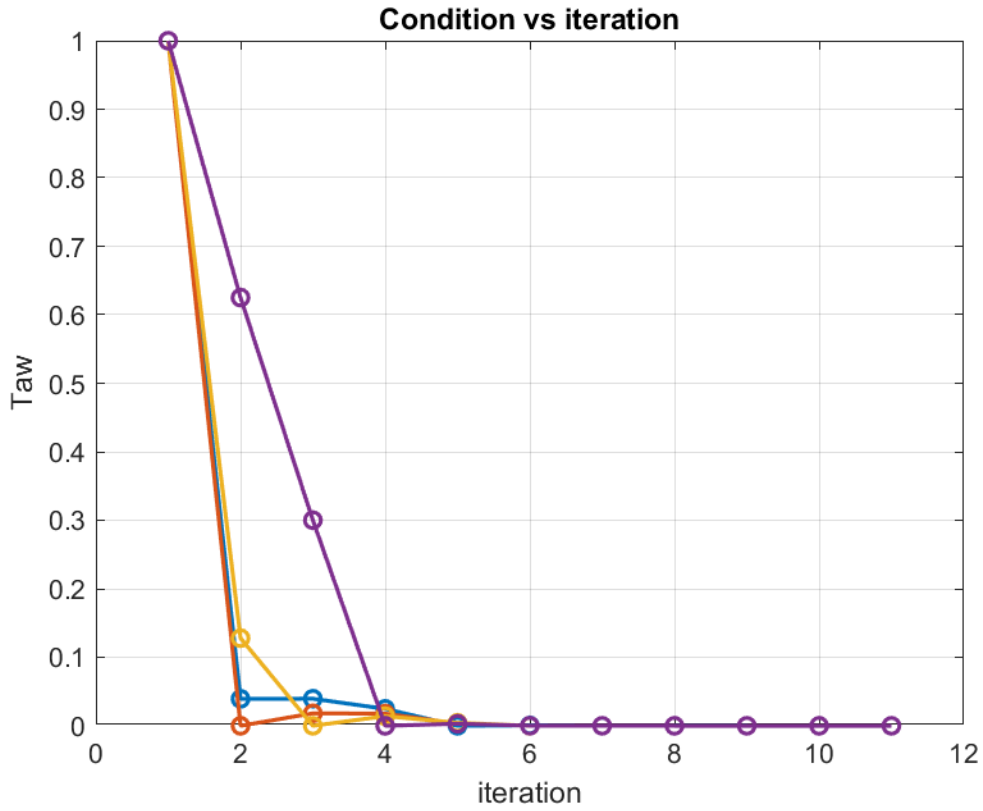
Case 1 results

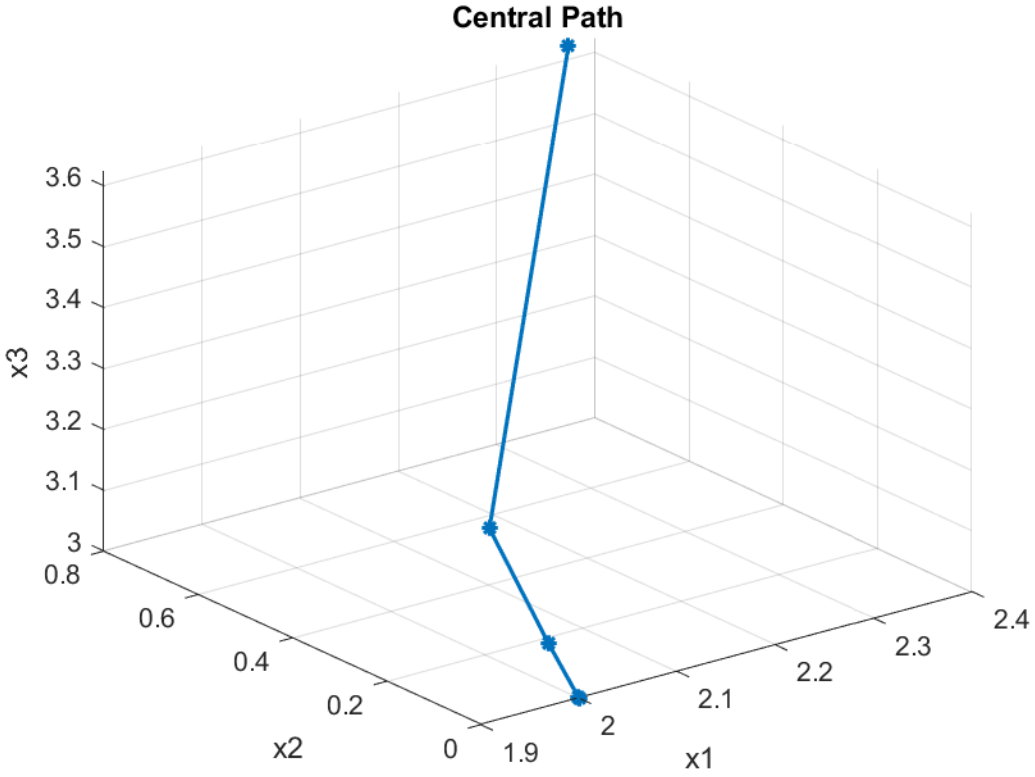
Constant

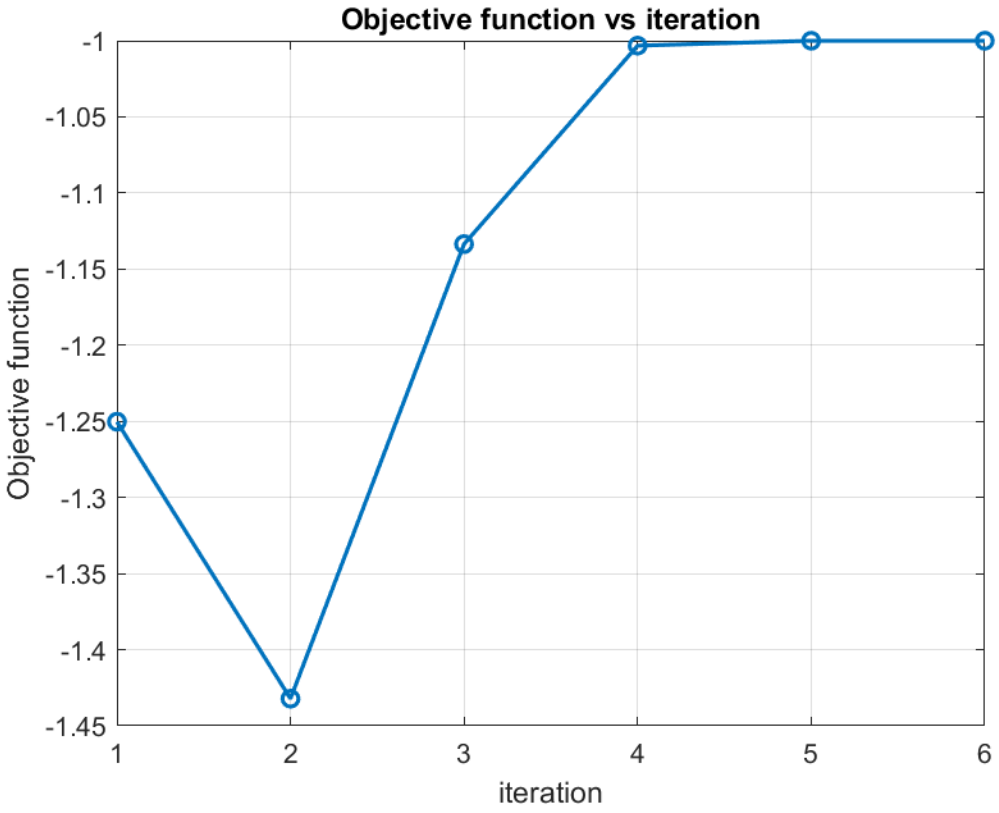


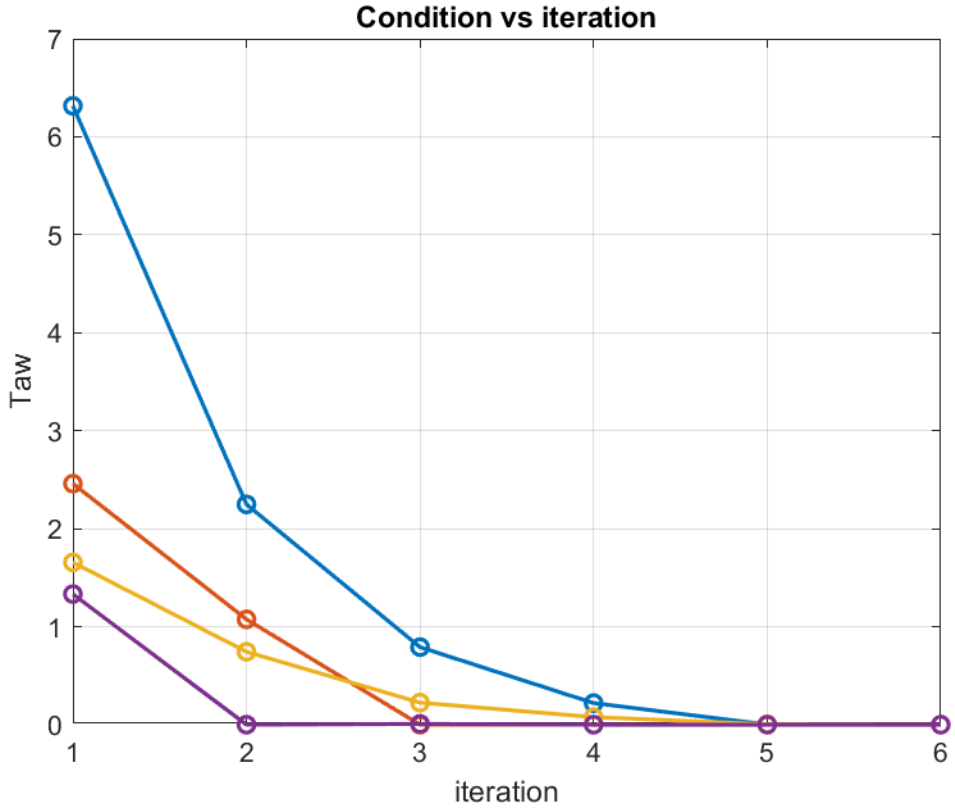



Condition vs iteration
Taw
iteration
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
0
2
4
6
8
10
12

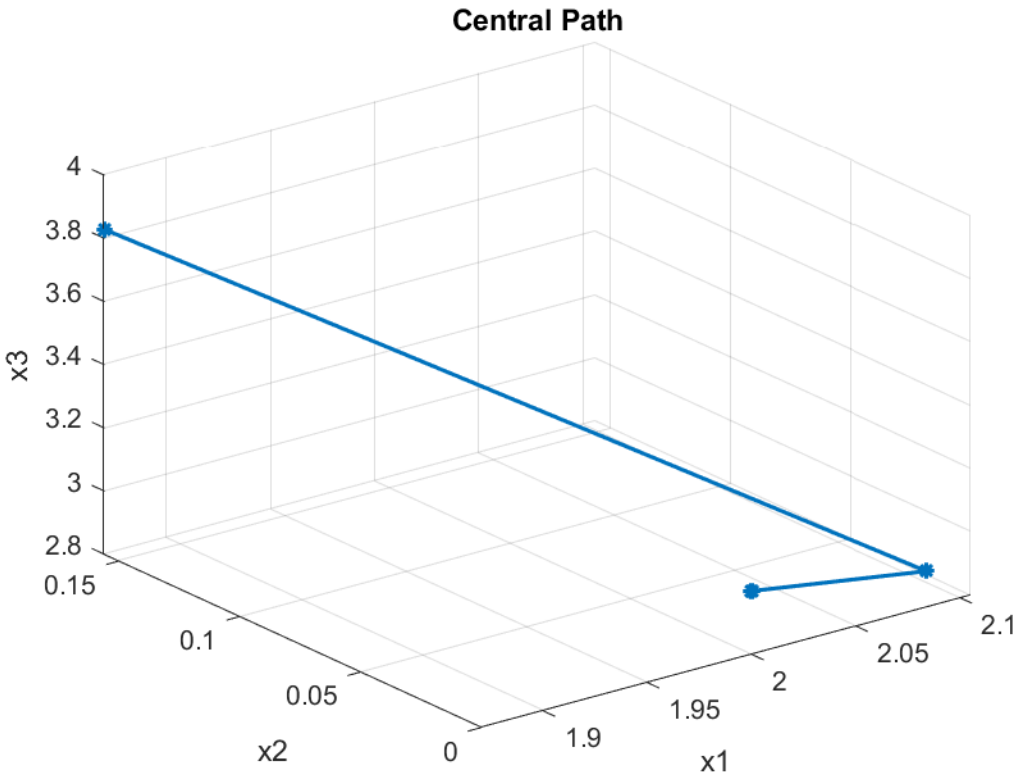
Adaptive

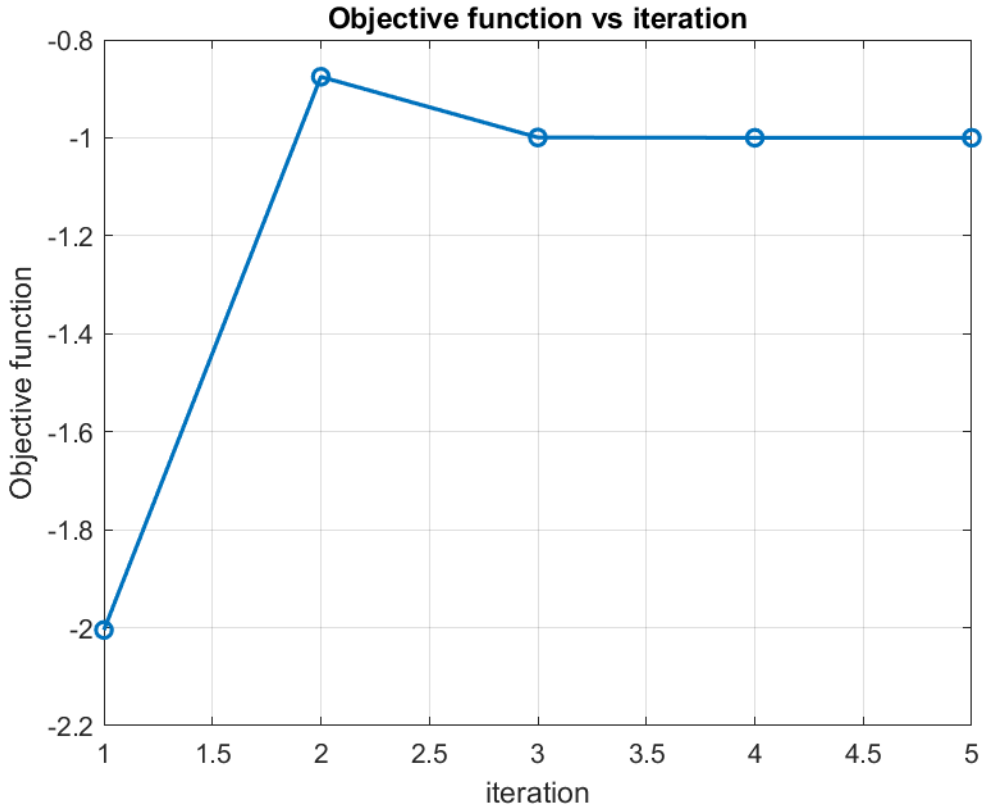

Central Path
x3
x2
x1
3
3.1
3.2
3.3
3.4
3.5
3.6
0
0.2
0.4
0.6
0.8
1.9
2
2.1
2.2
2.3
2.4

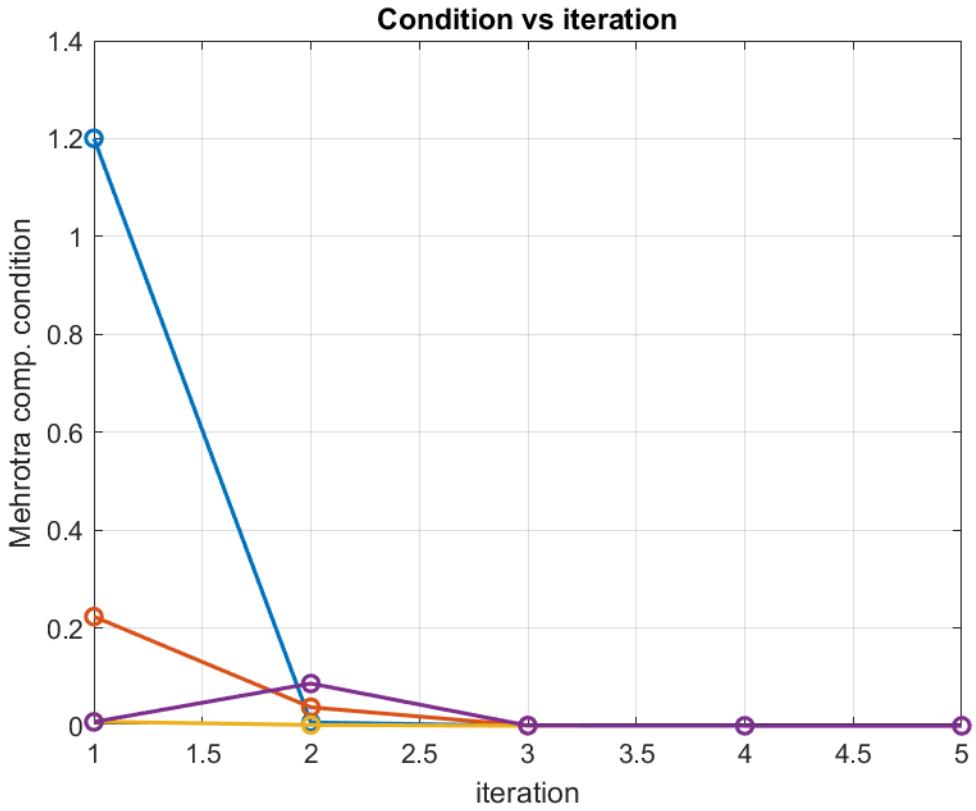

Objective function vs iteration
Objective function
iteration
-1
-1.05
-1.1
-1.15
-1.2
-1.25
-1.3
-1.35
-1.4
-1.45
1
2
3
4
5
6


Condition vs iteration
Taw
iteration
7
6
5
4
3
2
1
0
1
2
3
4
5
6

Mehrotra

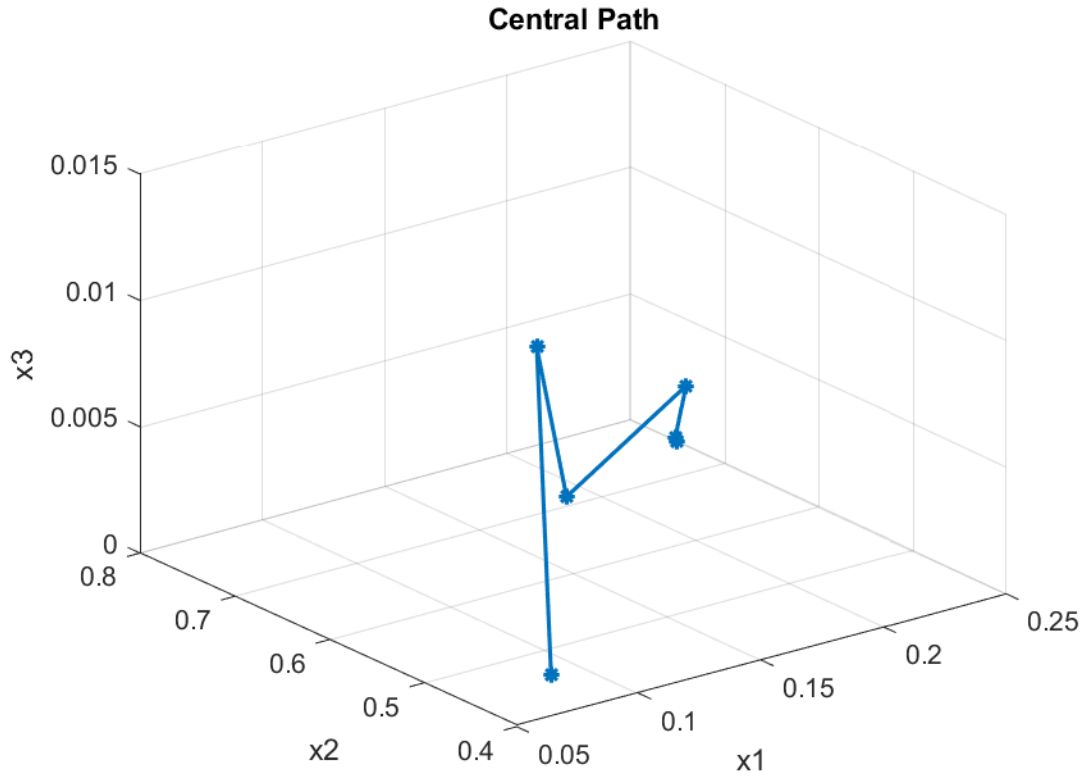

Central Path
x3
4
3.8
3.6
3.4
3.2
3
2.8
x2
0.15
0.1
0.05
0
x1
1.9
1.95
2
2.05
2.1

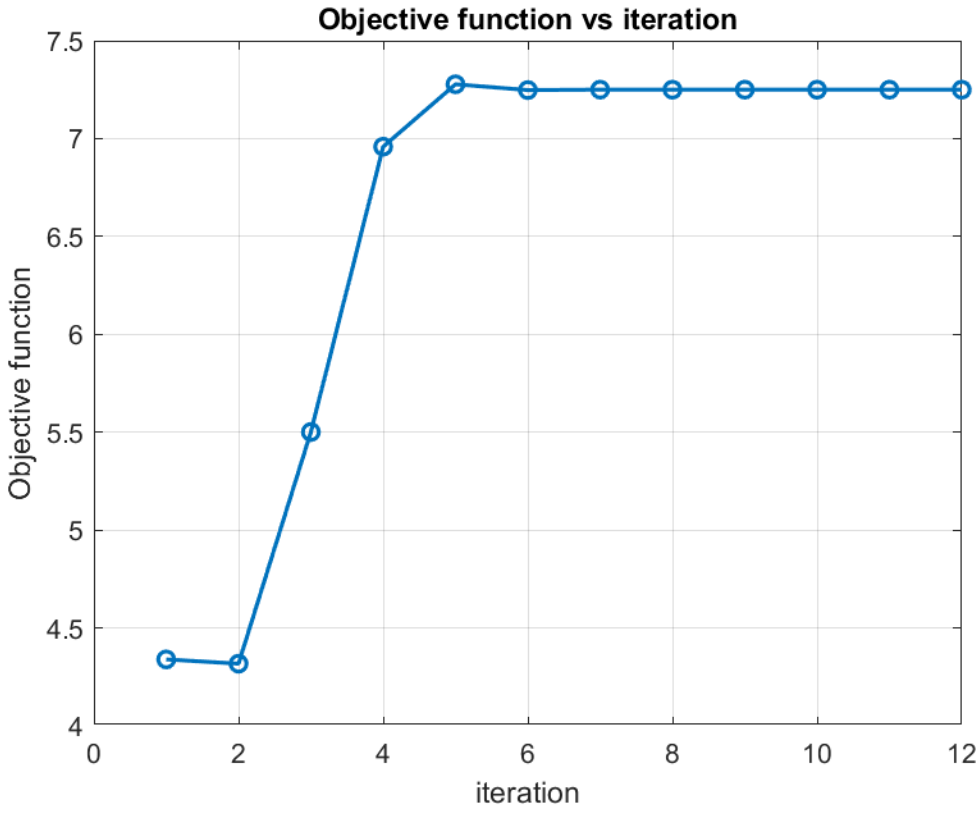

Objective function vs iteration
Objective function
-0.8
-1
-1.2
-1.4
-1.6
-1.8
-2
-2.2
iteration
1
1.5
2
2.5
3
3.5
4
4.5
5

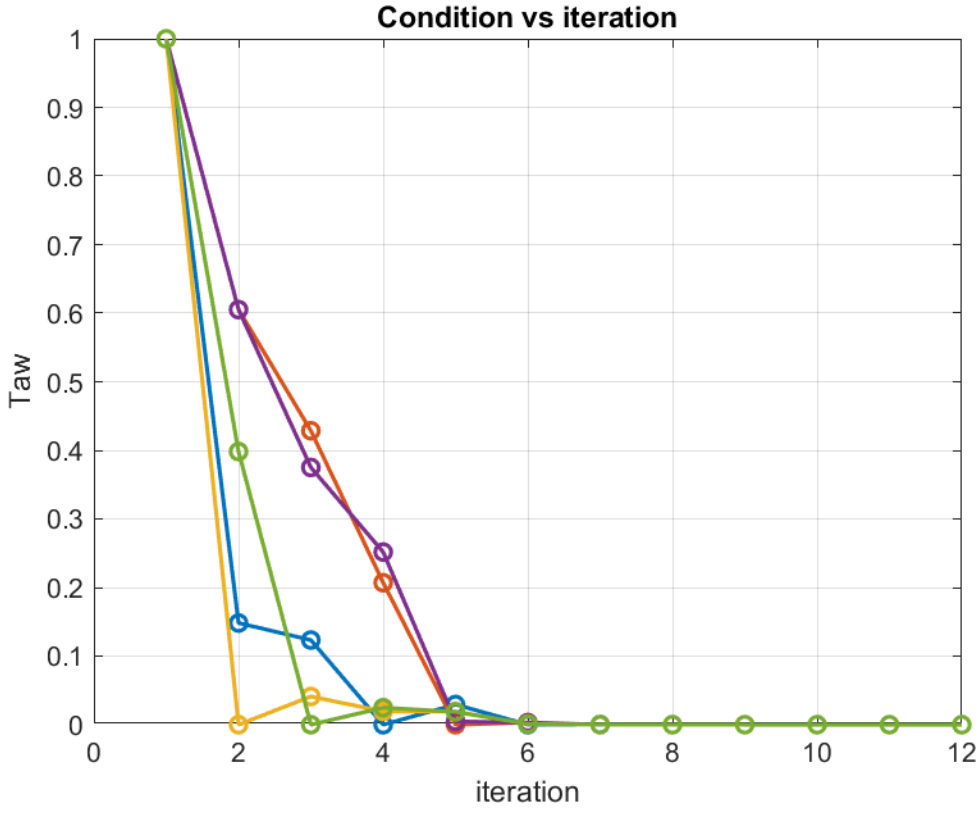


Case 2 results

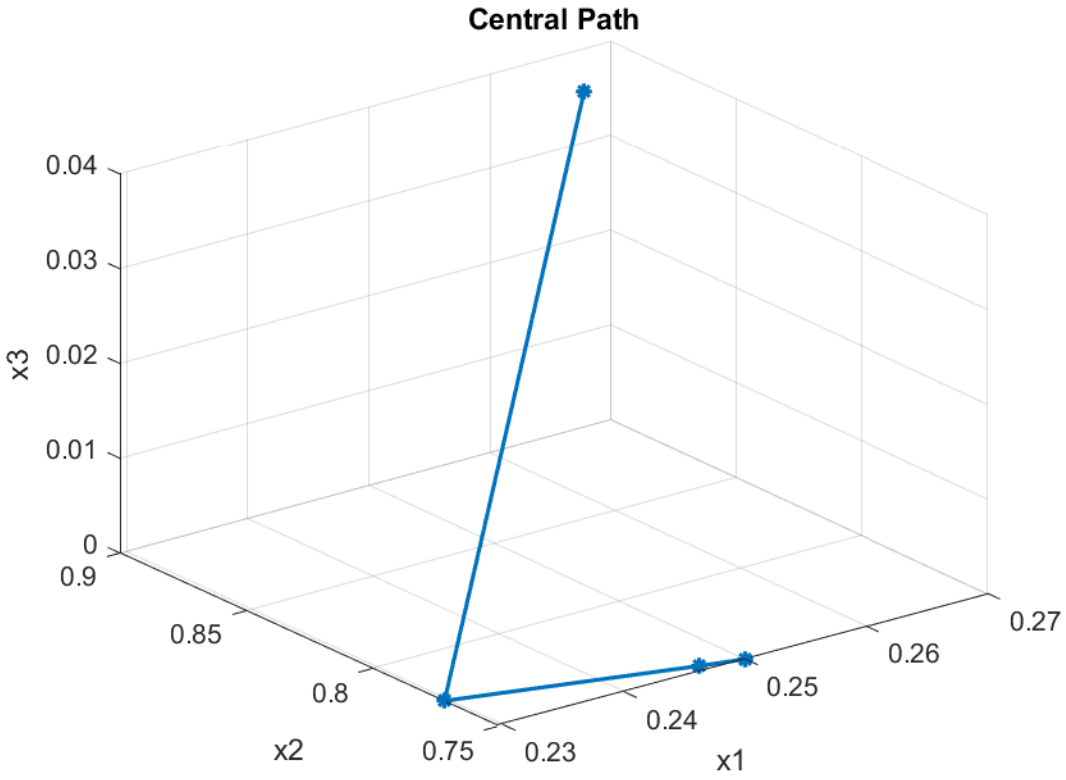
Constant

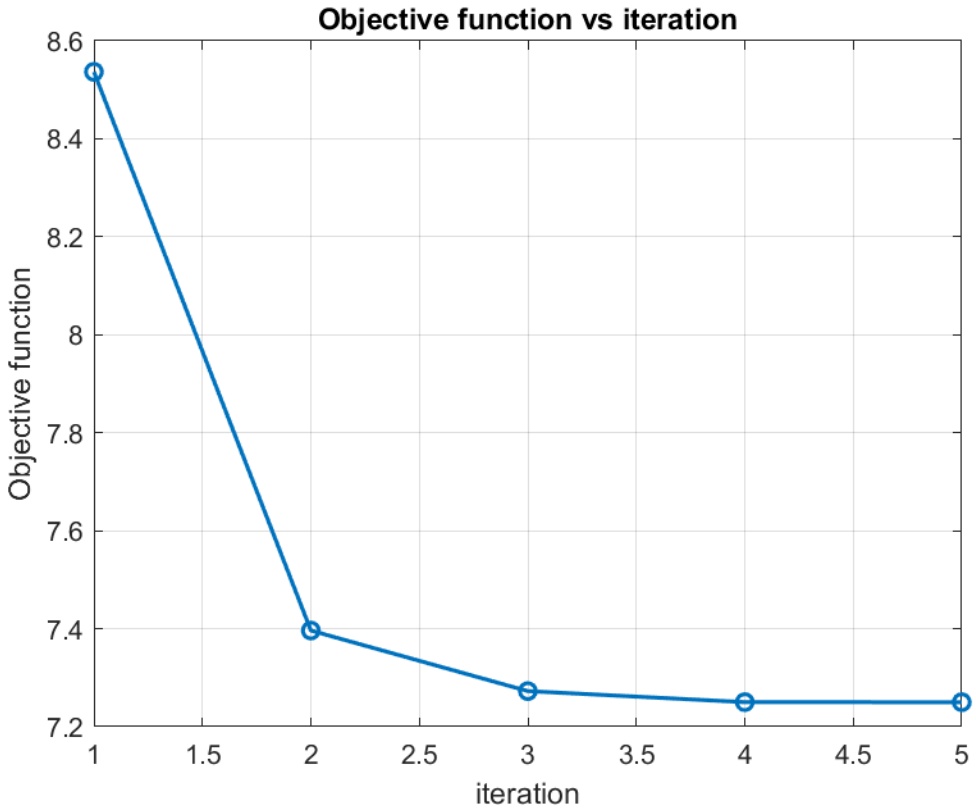


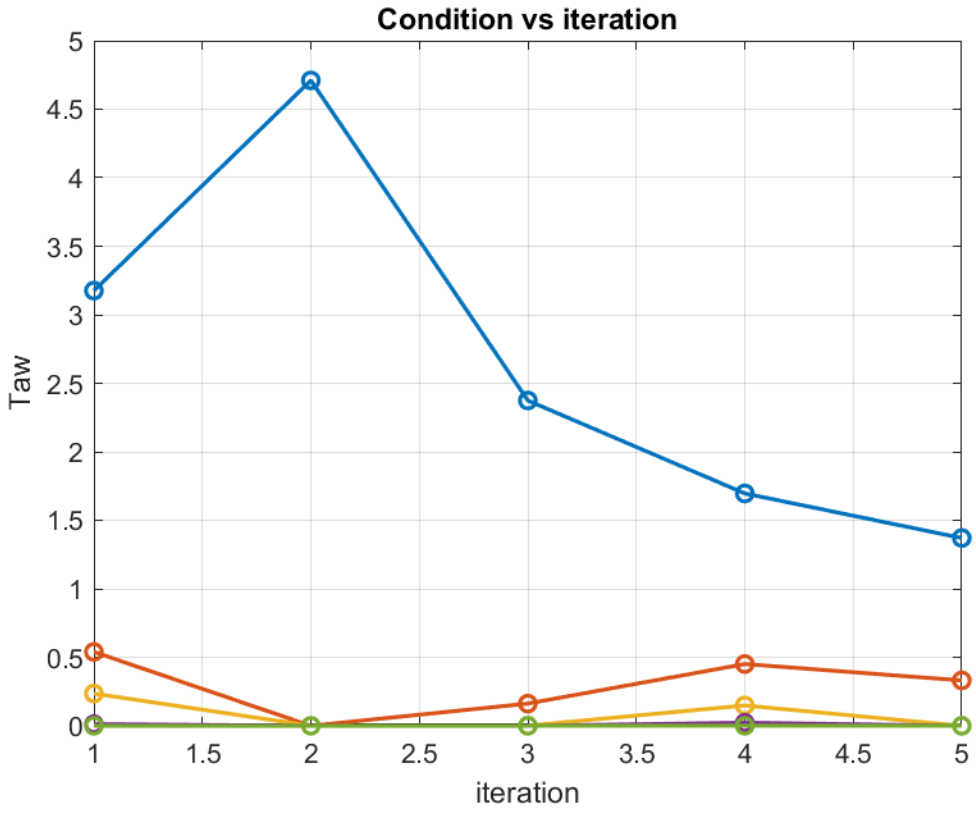

Objective function vs iteration
Objective function
iteration
7.5
7
6.5
6
5.5
5
4.5
4
0
2
4
6
8
10
12


Condition vs iteration
Taw
iteration
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0
2
4
6
8
10
12

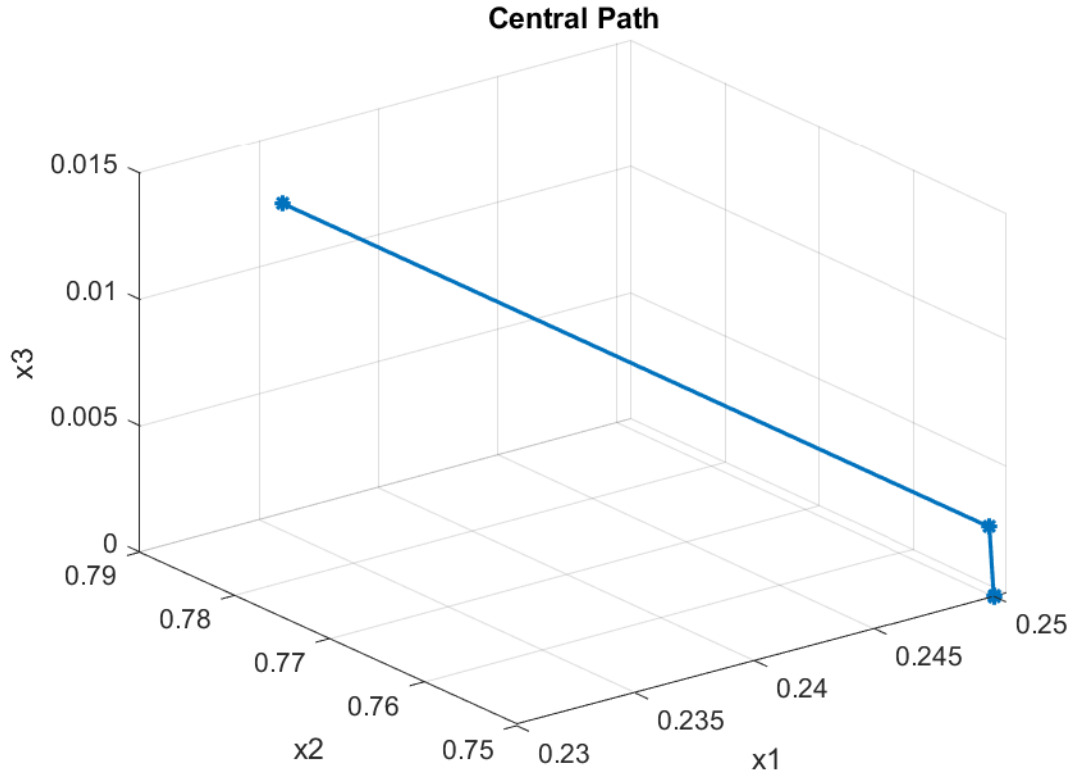
Adaptive

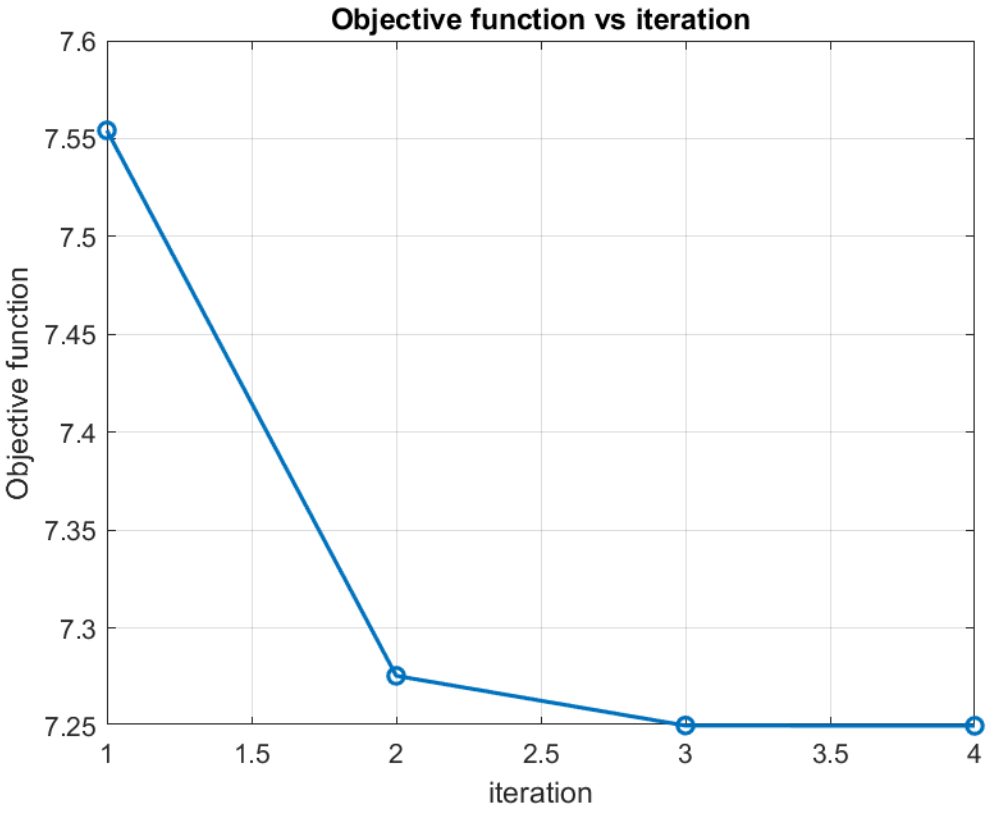

Central Path
x3
0.04
0.03
0.02
0.01
0
x2
0.9
0.85
0.8
0.75
x1
0.23
0.24
0.25
0.26
0.27

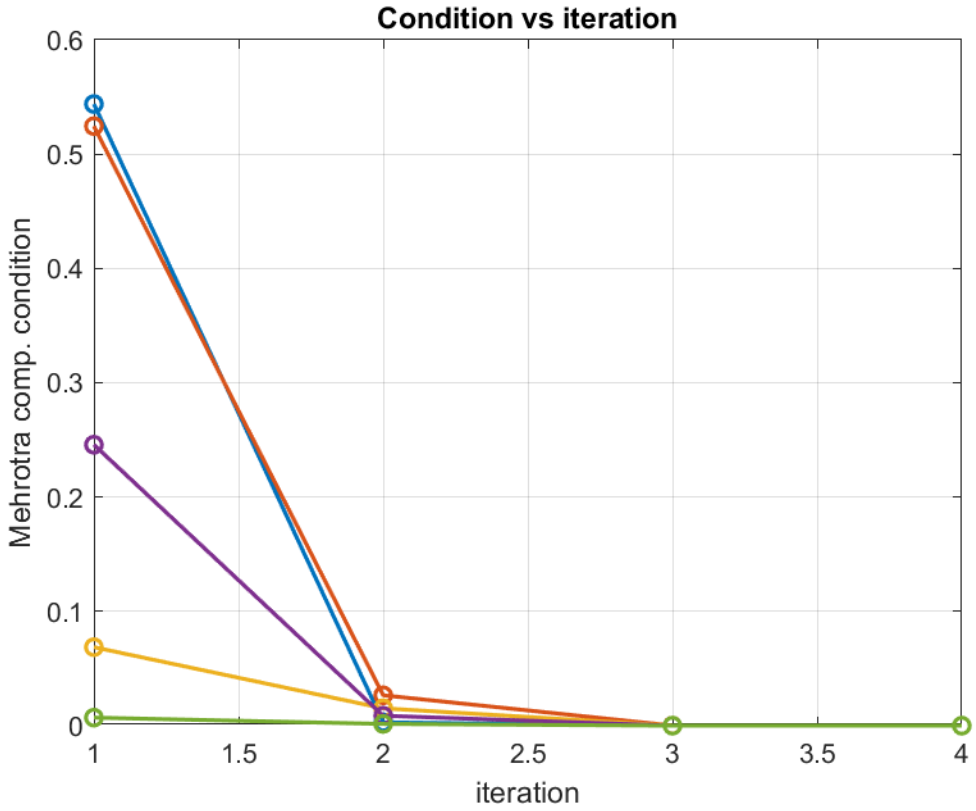

Objective function vs iteration
Objective function
8.6
8.4
8.2
8
7.8
7.6
7.4
7.2
iteration
1
1.5
2
2.5
3
3.5
4
4.5
5


Condition vs iteration
Taw
iteration
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
1
1.5
2
2.5
3
3.5
4
4.5
5

Mehrotra

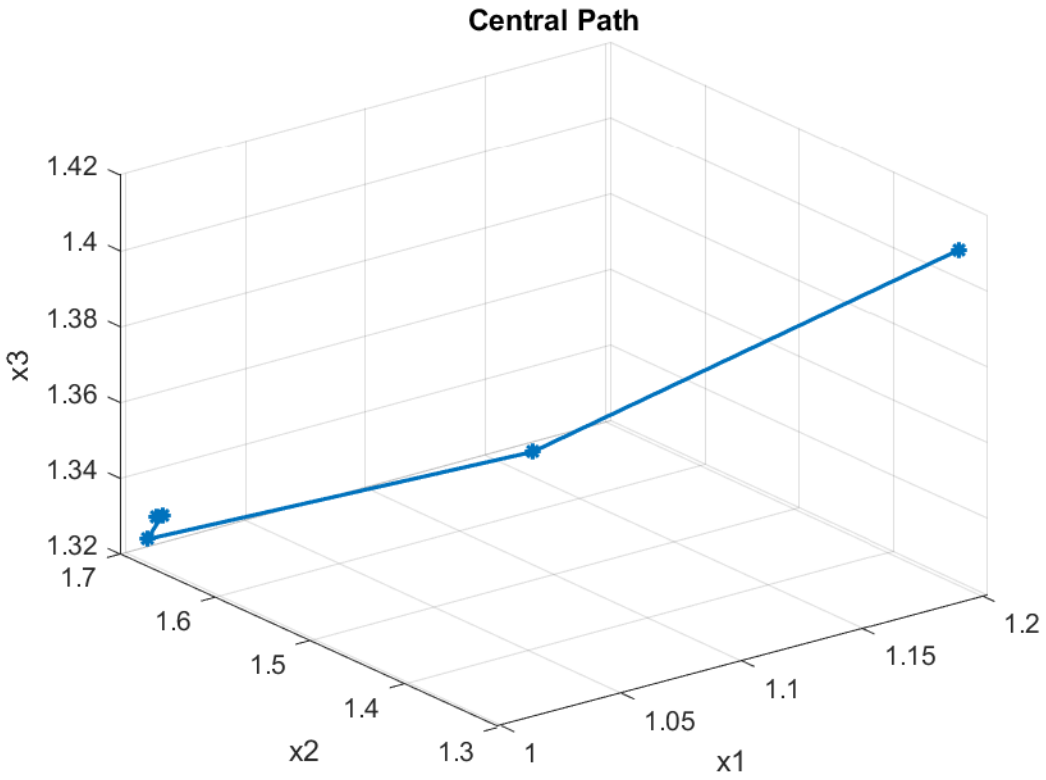

Central Path
x3
x2
x1
0.015
0.01
0.005
0
0.79
0.78
0.77
0.76
0.75
0.23
0.235
0.24
0.245
0.25

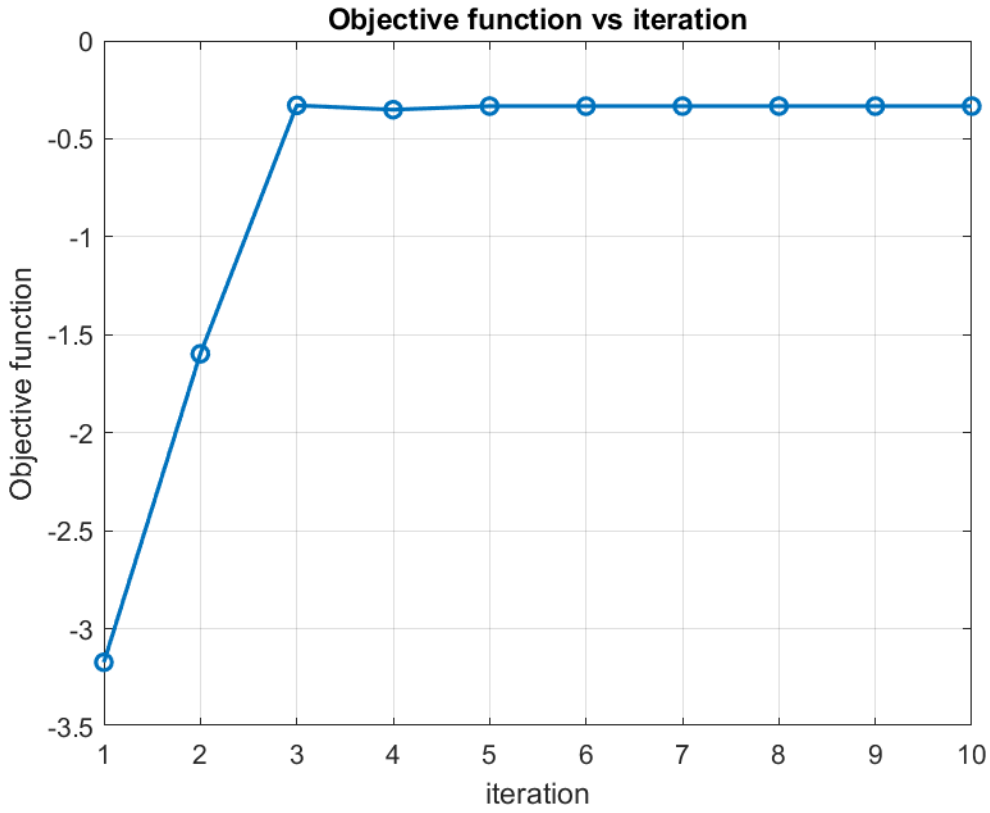

Objective function vs iteration
Objective function
iteration
7.6
7.55
7.5
7.45
7.4
7.35
7.3
7.25
1
1.5
2
2.5
3
3.5
4

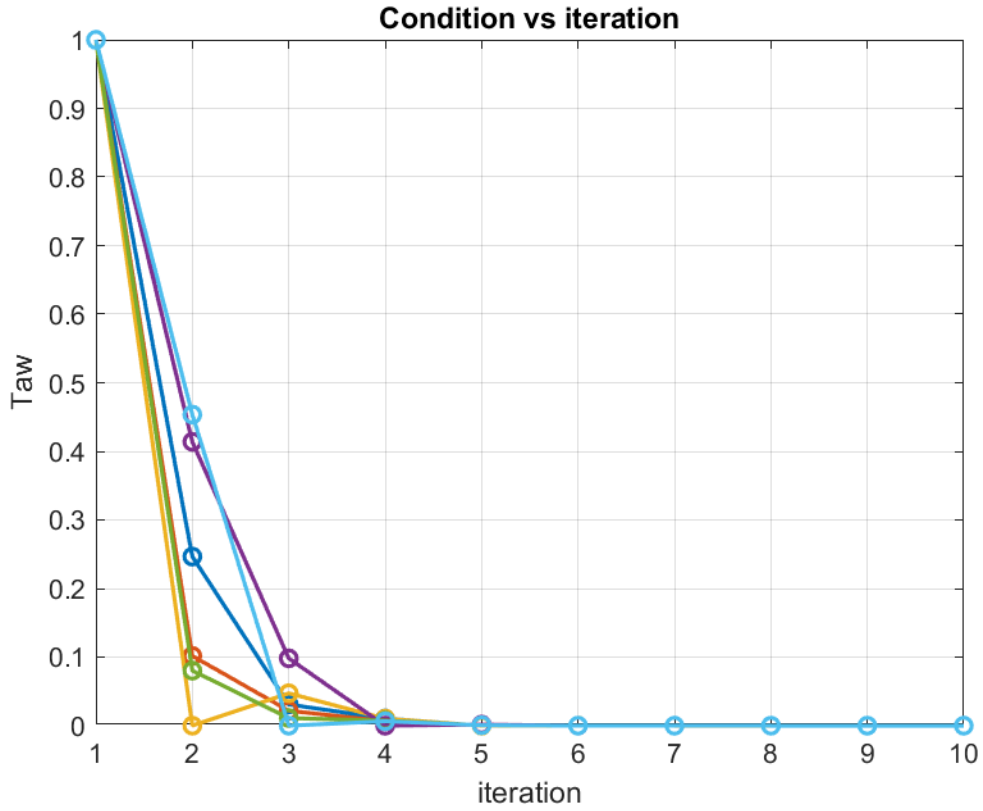

Condition vs iteration
Mehrotra comp. condition
iteration
0.6
0.5
0.4
0.3
0.2
0.1
0
1
1.5
2
2.5
3
3.5
4

Case 3 Results

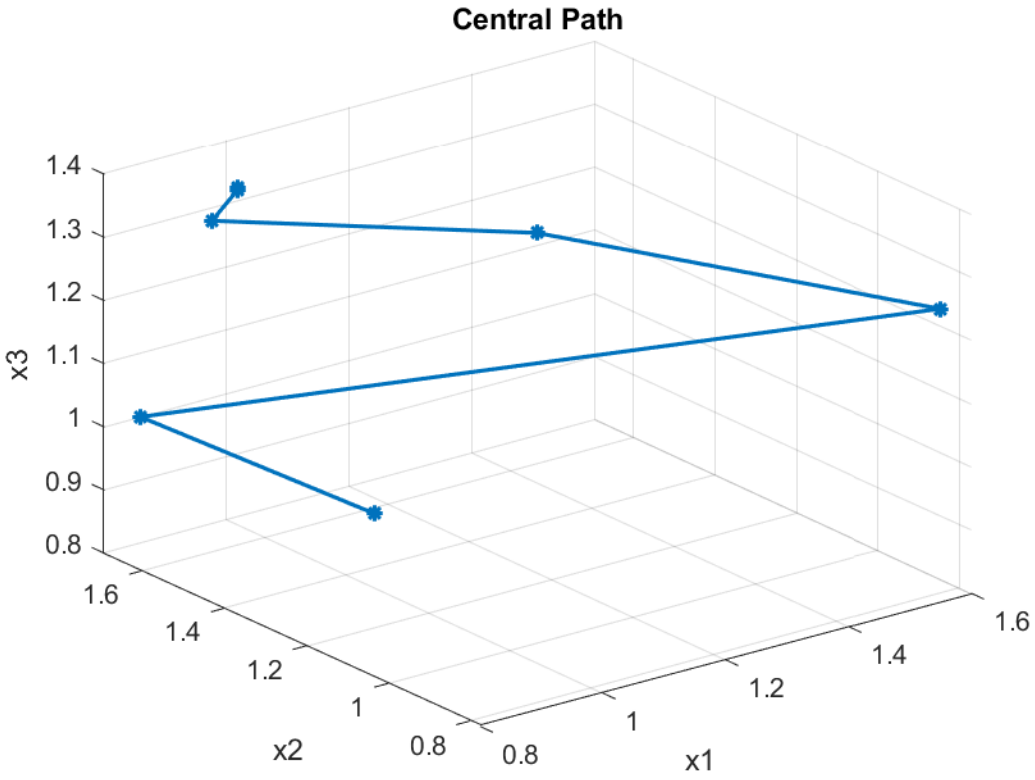
Constant

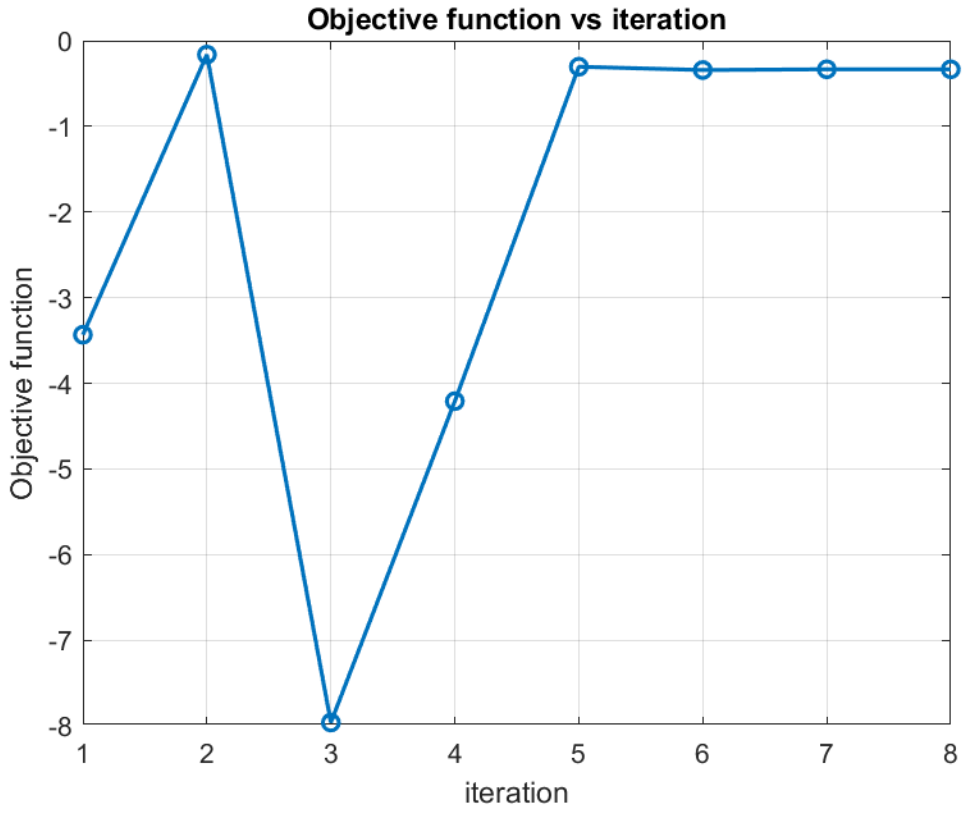


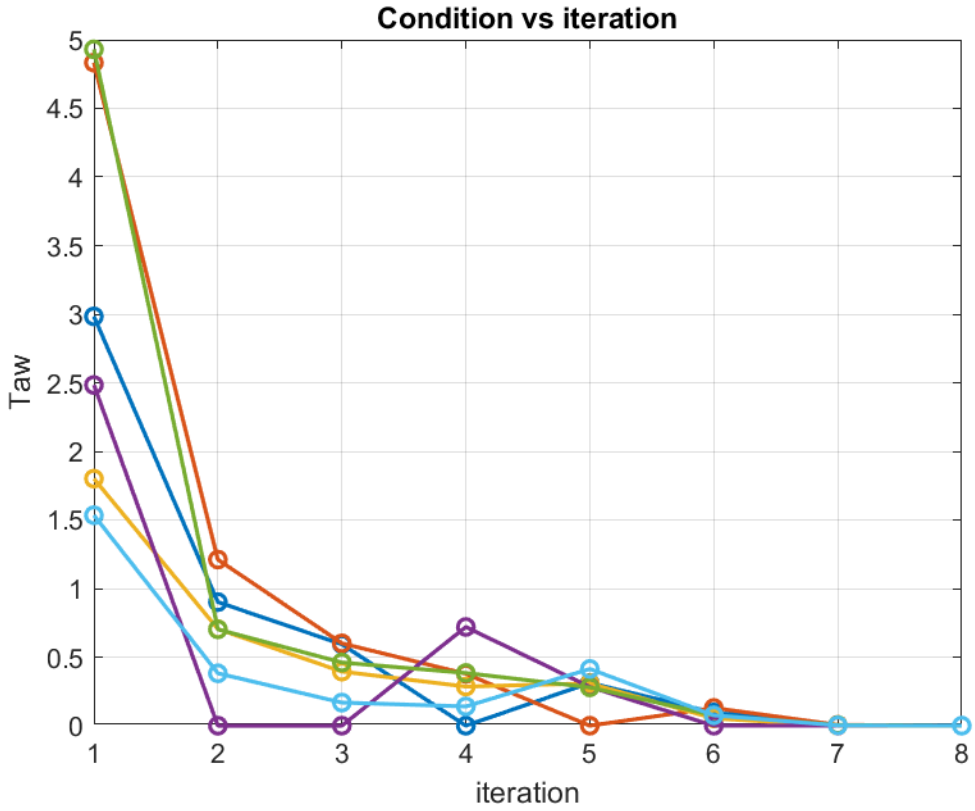



Condition vs iteration
Taw
iteration
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
1
2
3
4
5
6
7
8
9
10

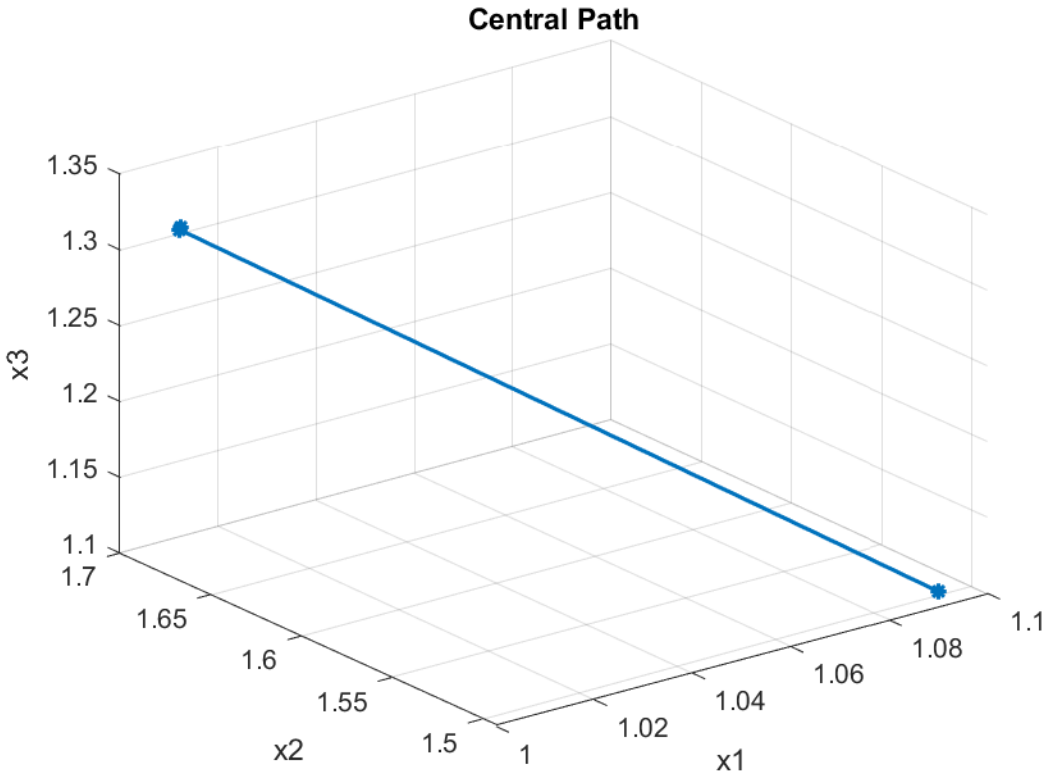
Adaptive

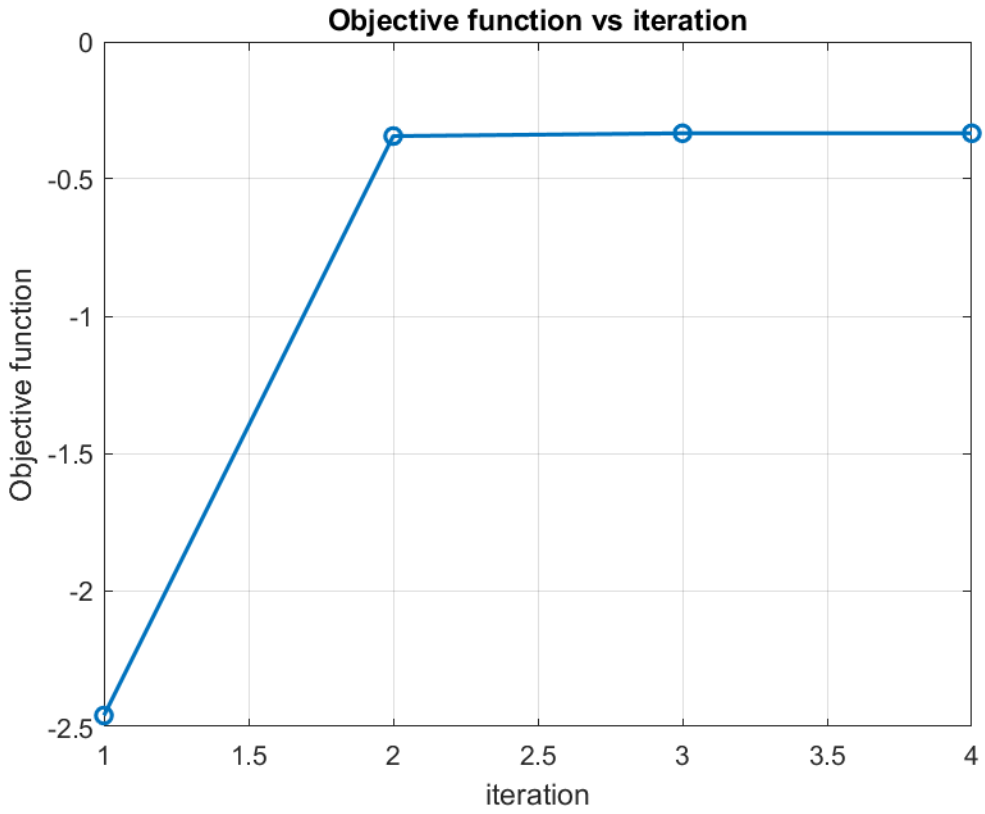

Central Path
x3
x2
x1
1.4
1.3
1.2
1.1
1
0.9
0.8
1.6
1.4
1.2
1
0.8
1.6
1.4
1.2
1
0.8

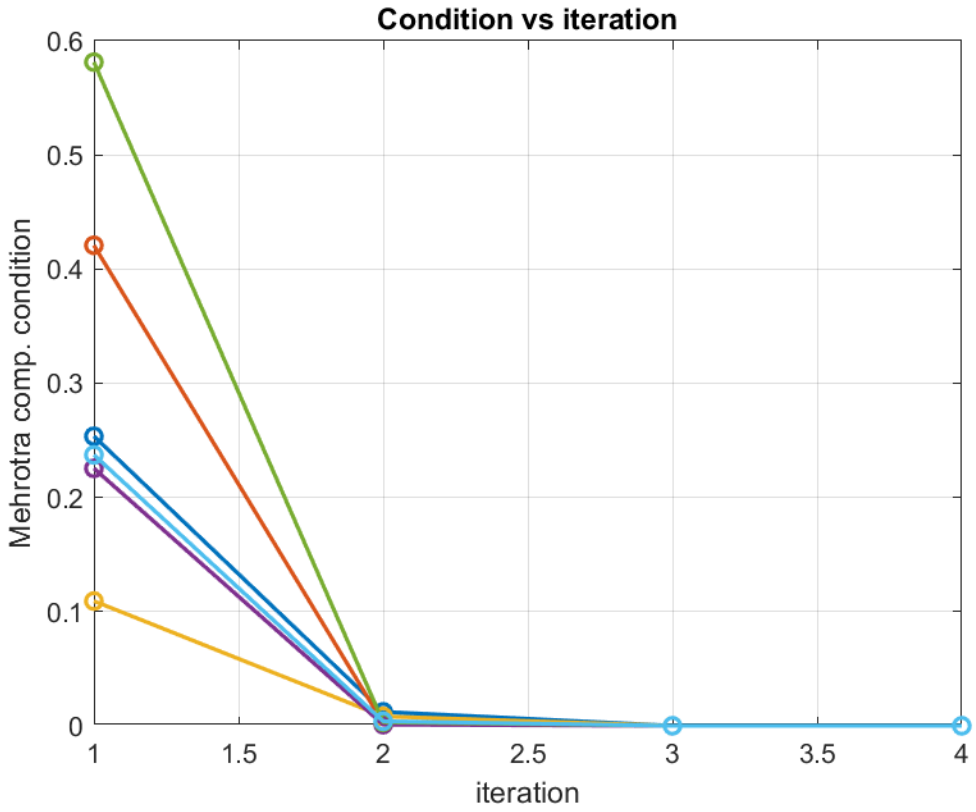

Objective function vs iteration
Objective function
iteration
0
-1
-2
-3
-4
-5
-6
-7
-8
1
2
3
4
5
6
7
8


Condition vs iteration
Taw
iteration
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
1
2
3
4
5
6
7
8

Mehrotra


Central Path
x3
1.35
1.3
1.25
1.2
1.15
1.1
1.7
1.65
1.6
1.55
1.5
x2
1
1.02
1.04
1.06
1.08
1.1
x1


Objective function vs iteration
Objective function
0
-0.5
-1
-1.5
-2
-2.5
1
1.5
2
2.5
3
3.5
4
iteration


Condition vs iteration
Mehrotra comp. condition
iteration
0.6
0.5
0.4
0.3
0.2
0.1
0
1
1.5
2
2.5
3
3.5
4