DISK PACKING PROBLEM - TESTING (Equivalent Model)

Algorithm's details: MaxSearch = 1000, MaxNoImprove = 100, MaxError respect Packomania: 10^-4
Machine's details: Amazon Ec2 m2.xlarge with Debian, 4 core and 16 GB of memory
Solver: KNITRO

#	Amount Disks
1	25
2	50
3	75
4	100
5	125
6	135
7	145

Statistics of #10 RUN with N = 25

#	Elapsed time	Local optimizations	Objective Distance
1	1,00	6	0,249999754945
2	1,00	18	0,249999989942
3	1,00	9	0,249999999957
4	6,00	92	0,249999996980
5	0,00	8	0,249999999968
6	1,00	3	0,249999999823
7	1,00	8	0,249999903461
8	2,00	33	0,249999895513
9	6,00	88	0,249999998442
10	28,00	402	0,249999999902
AVG	4,700	66,700	0,249999953893

Statistics of #10 RUN with N = 50

#	Elapsed time	Local optimizations	Objective Distance
1	1,00	2	0,166454622859
2	13,00	33	0,166454597195
3	151,00	373	0,166526574227
4	8,00	16	0,166454571880
5	11,00	23	0,166526512148
6	36,00	93	0,166454624511
7	74,00	186	0,166454610235
8	32,00	67	0,166454621196
9	64,00	174	0,166454520186
10	23,00	49	0,166454600606
AVG	41,300	101,600	0,166468985504

Statistics of #10 RUN with N = 75

#	Elapsed time	Local optimizations	Objective Distance
1	12,00	8	0,132394323923
2	156,00	101	0,132418016895
3	1.511,00	1.014	0,132425045629
4	534,00	350	0,132439574454
5	422,00	284	0,132389255661
6	114,00	75	0,132403981681
7	706,00	496	0,132442995045
8	410,00	283	0,132449702962
9	190,00	139	0,132431492903
10	230,00	160	0,132418843021
AVG	428,500	291,000	0,132421323217

Statistics of #10 RUN with N = 100

	Elapsed time	Local optimizations	Objective Distance
1	4.940,000	1.428	0,11456091132
2	5.416,000	1.614	0,11456919001
3	2.106,000	630	0,11457489941
4	372,000	85	0,11455783169
AVG	3.208,500	939,250	0,114565708107

Statistics of #10 RUN with N = 125

#	Elapsed time	Local optimizations	Objective Distance
1	6.021,000	721	0,101173067088
AVG	6.021,000	721,000	0,101173067088

Statistics of #10 RUN with N = 135

#	Elapsed time	Local optimizations	Objective Distance
1	7.998,000	827	0,097430329016
AVG	7.998,000	827,000	0,097430329016

Statistics of #10 RUN with N = 145

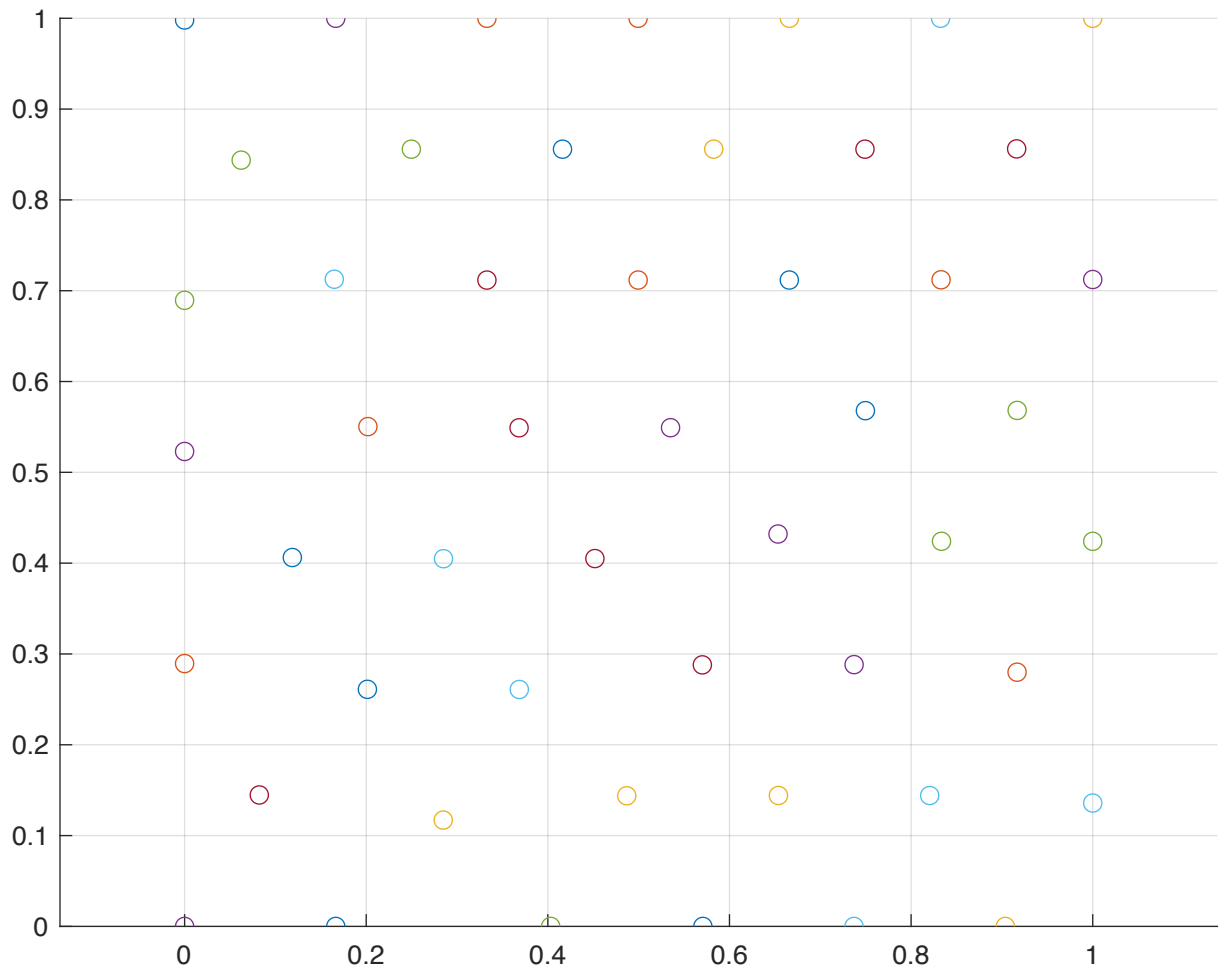| #	Elapsed time	Local optimizations	Objective Distance
1	21.387,0	1.761	0,093783965403
AVG	21.387,000	1.761,000	0,093783965403

NOTA: Per gli step N = 100; N = 125, N = 135, N = 145, non è stato possibile eseguire 10 Run a causa degli elevati tempi richiesti da ogni singolo run
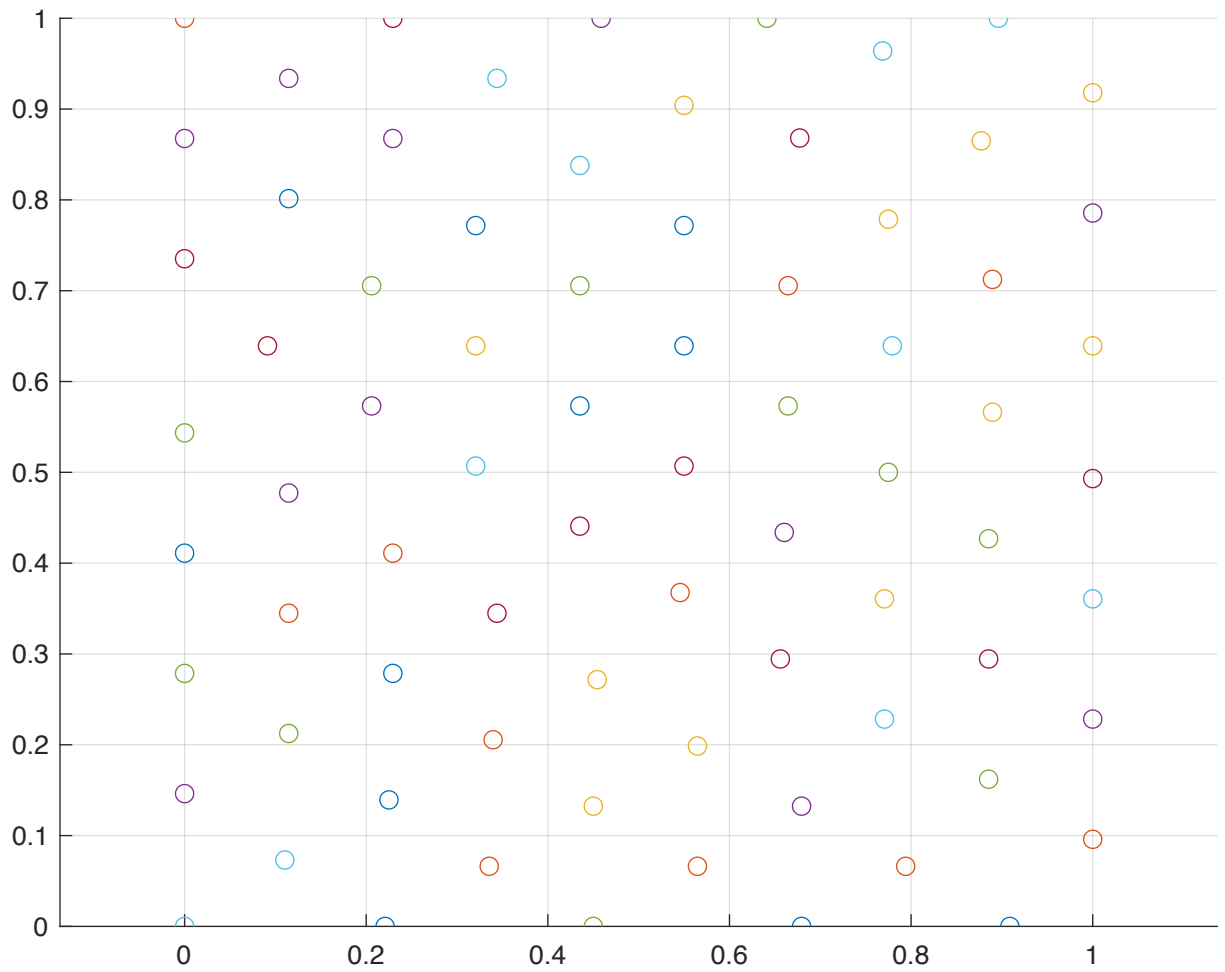
Elapsed Time Average of 10 runs for each N

Local Optimizations Average of 10 runs for each N

Objective Distance Average
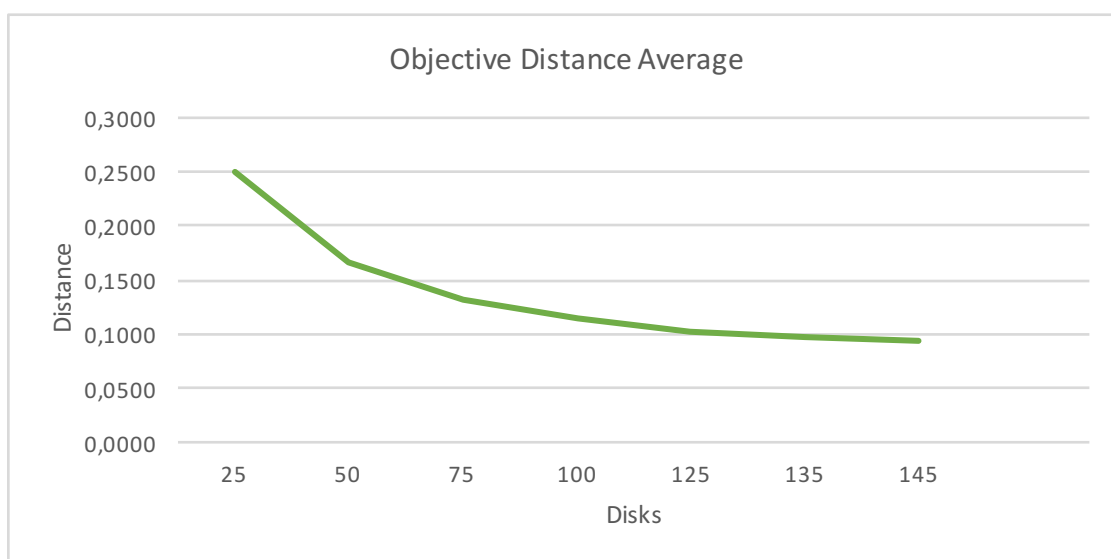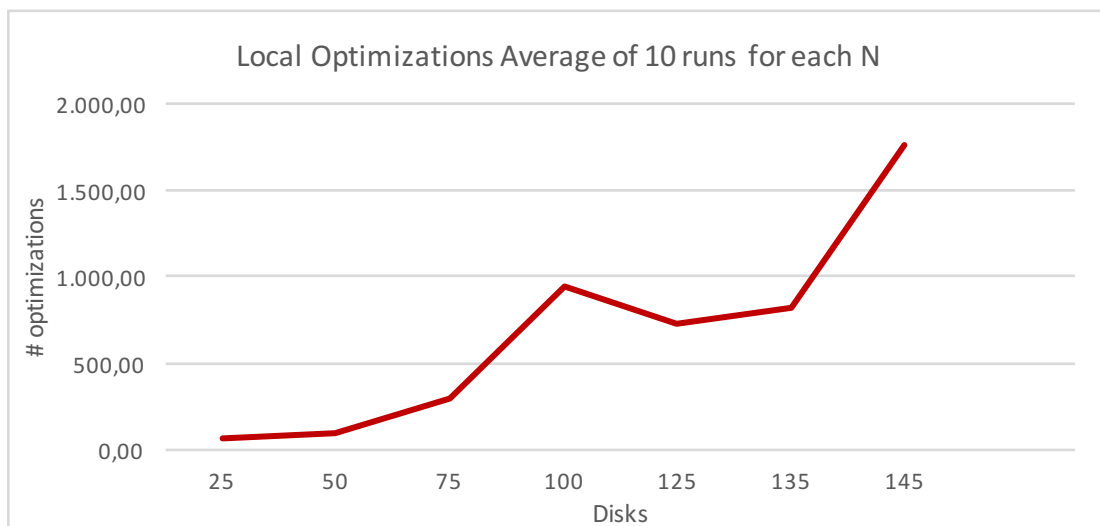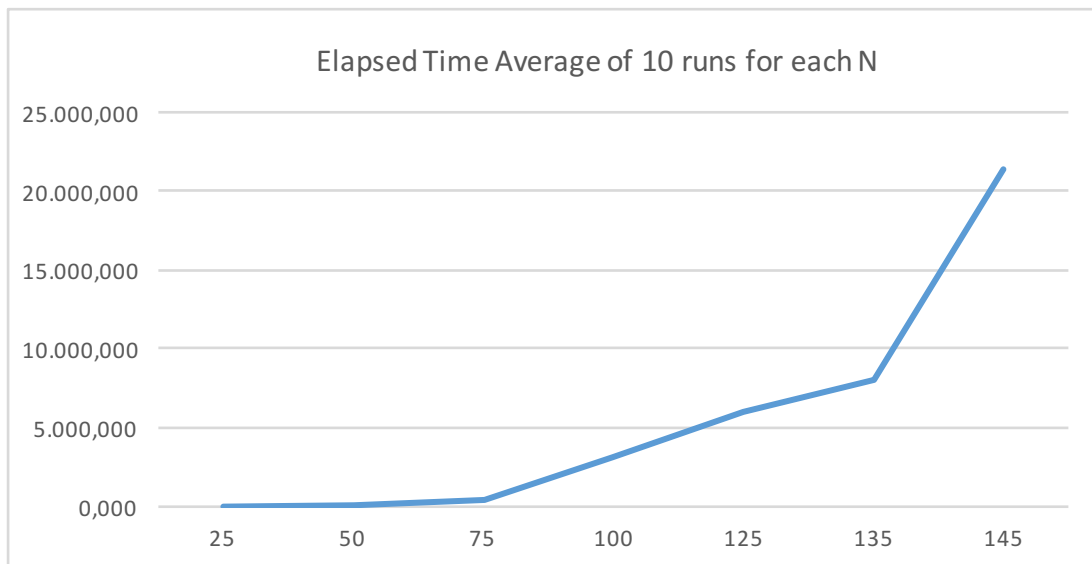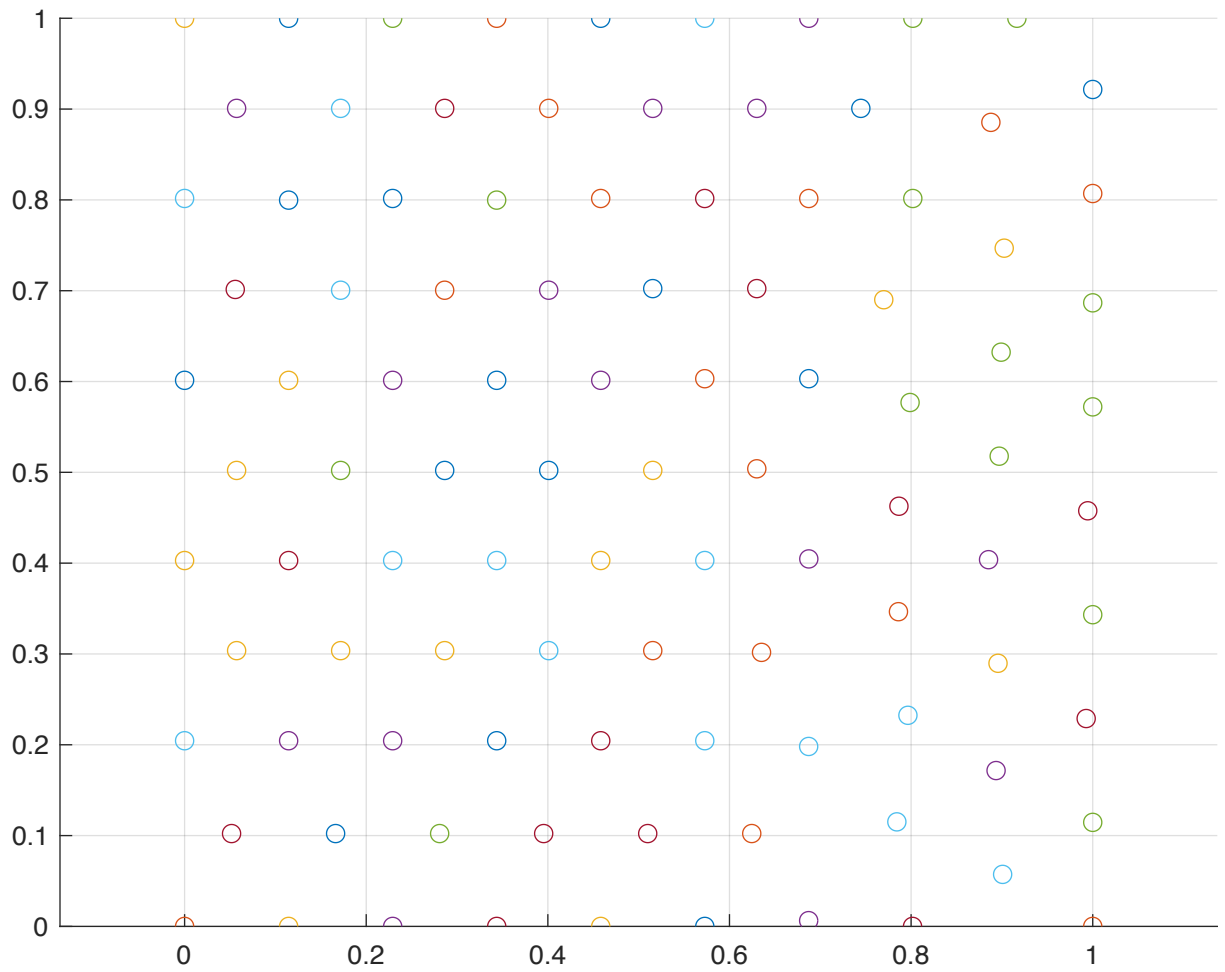
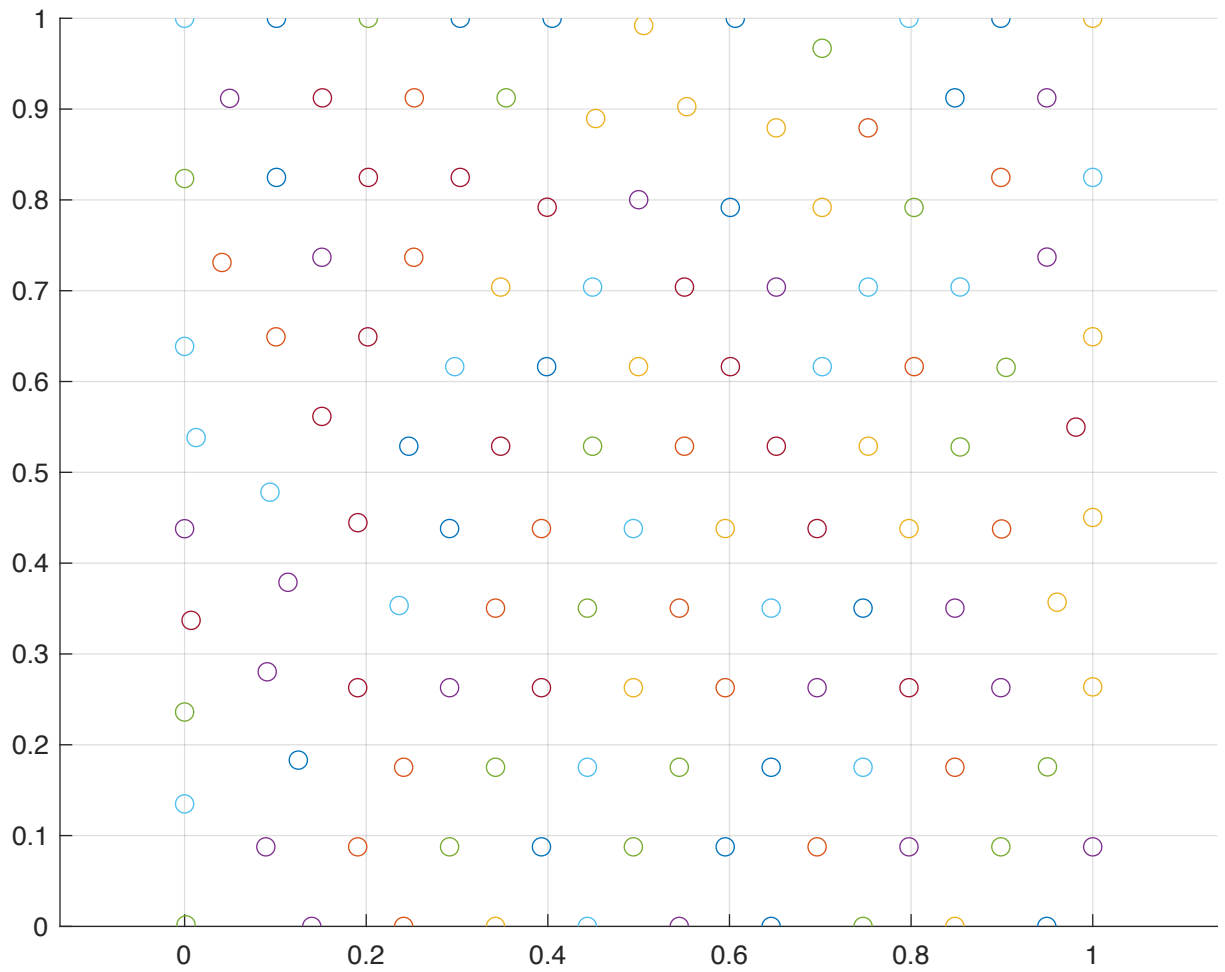N = 25 - EQUIVALENT MODEL
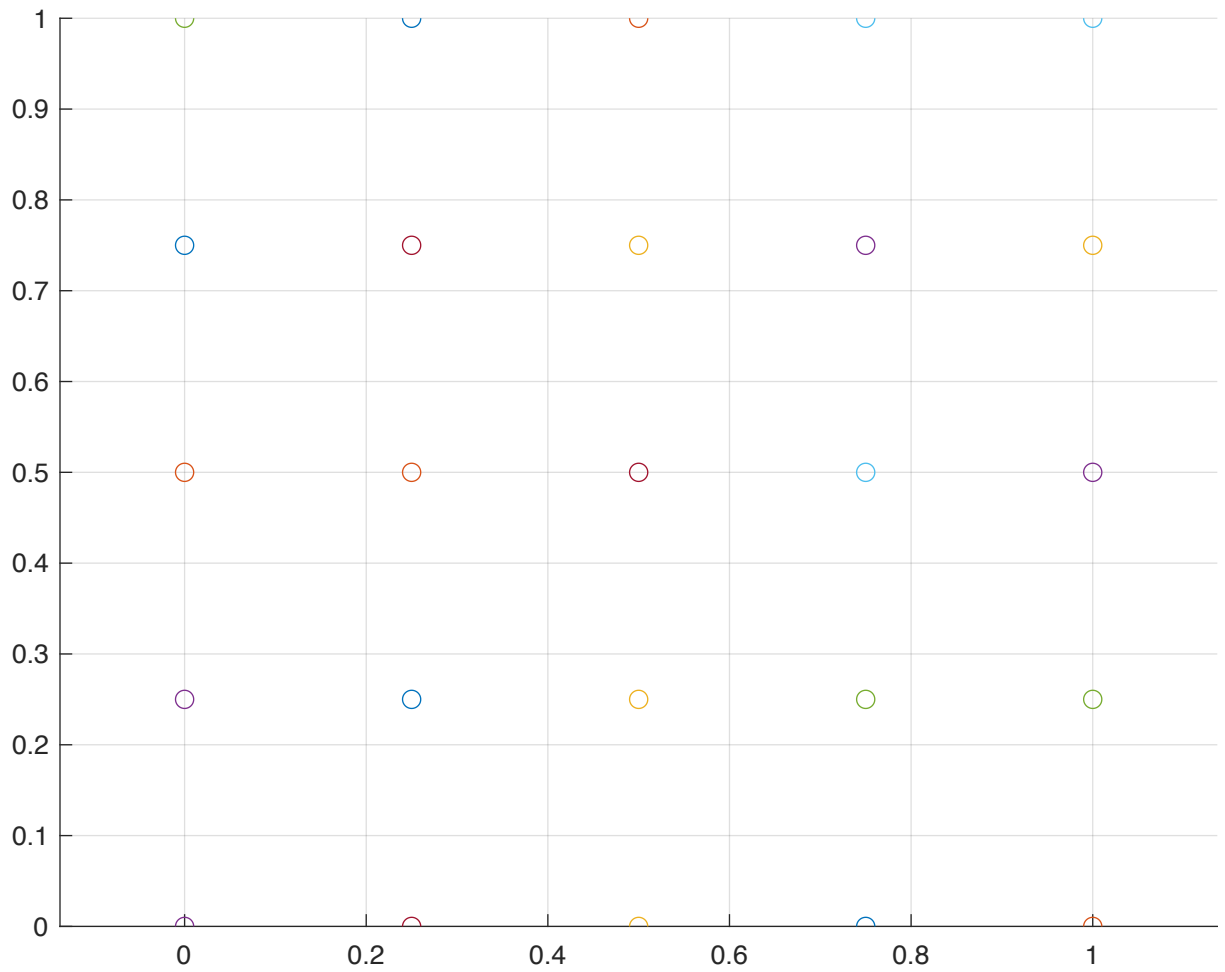
N = 50 - EQUIVALENT MODEL

N = 75 - EQUIVALENT MODEL

N = 100 - EQUIVALENT MODEL

N = 125 - EQUIVALENT MODEL

N = 135 - EQUIVALENT MODEL

N = 145 - EQUIVALENT MODEL