

	Q2	Q1	Qn	Qp	Q0
Q2	12	11	11	11	11
Q1	11	1	1	1	10
Qn	11	1	9	2	10
Qp	11	1	2	9	10
Q0	11	10	10	10	8

P5	P4	P3	P2	P1	N3	N2	N1	N0	C6	C5	C4	C3	C2	C1
0	1	2	3	4	4	4	5	6	12	14	16	17	19	19
1	2	3	3	4	4	5	6	7	12	14	16	17	19	19
2	3	4	5	6	6	7	7	8	11	13	15	16	18	18
2	3	4	5	6	6	7	7	8	10	11	12	14	18	18
3	4	5	5	7	7	8	8	9	9	10	11	13	18	18

X3	X2	X1
14	15	16
14	15	16
14	15	16
12	13	14
11	12	13

W	
0	Q2
1	Q1
2	Qn
2	Qp
3	Q0

P5	0	1	2	2	3
P4	1	2	3	3	4
P3	2	3	4	4	5
P2	3	3	5	5	5
P1	4	4	6	6	7
N3	4	4	6	6	7
N2	4	5	7	7	8
N1	5	6	7	7	8
N0	6	7	8	8	9
C6	12	12	11	10	9
C5	14	14	13	11	10
C4	16	16	15	12	11
C3	17	17	16	14	13
C2	19	19	18	18	18
C1	19	19	18	18	18

2	3	4	4	5	7	9	10	11	11	12	14	15	16	17
3	4	5	6	6	8	9	10	10	11	12	14	15	16	17
4	5	5	6	7	8	9	9	10	10	11	13	14	15	16
4	6	6	6	7	7	8	9	10	10	11	12	14	14	15
5	6	7	7	7	7	8	9	9	10	11	12	13	14	15
7	8	8	7	7	7	8	9	9	10	11	11	12	13	14
9	9	9	8	8	8	8	8	9	10	10	11	11	13	13
10	10	9	9	9	8	8	9	10	10	10	11	11	13	13
11	10	10	10	9	9	9	10	10	10	10	11	11	12	12
11	11	10	10	10	10	10	10	10	9	9	10	10	12	12
12	12	11	11	11	11	10	10	10	10	9	10	10	12	12
14	14	13	12	12	11	11	11	11	10	10	10	10	12	12
15	15	14	14	13	12	11	11	11	10	10	10	10	11	11
16	16	15	14	14	13	13	13	12	12	12	12	11	10	10
17	17	16	15	15	14	13	13	12	12	12	12	11	10	10

12	13	14
12	13	14
12	13	14
11	12	13
11	12	12
10	11	11
9	10	11
9	10	11
9	10	10
9	10	10
9	10	10
10	11	10
11	11	10
12	11	10
12	11	10

3	P5
4	P4
5	P3
6	P2
7	P1
7	N3
8	N2
9	N1
10	N0
12	C6
14	C5
15	C4
16	C3
17	C2
17	C1

X3	14	14	14	12	11
X2	15	15	15	13	12
X1	16	16	16	14	13

12	12	12	11	11	10	9	9	9	9	9	10	11	12	12
13	13	13	12	12	11	10	10	10	10	10	10	11	11	11
14	14	14	13	12	11	11	11	10	10	10	10	10	10	10

9	9	9
9	9	8
9	8	8

12	X3
13	X2
14	X1

W	0	1	2	2	3
	Q2	Q1	Qn	Qp	Q0

3	4	5	6	7	7	7	8	9	10	12	14	15	16	17
P5	P4	P3	P2	P1	N3	N2	N1	N0	C6	C5	C4	C3	C2	C1

12	13	14
X3	X2	X1

-	W
W	

original levels
new_levels

	0		1		2		3		4		5		6		7		8		9	
0 1	2 3	4 5	6 7	8 9	10 11	12 13	14 15	16	17	18	19									
hyper attractive	supra attractive	attractive	almost attractive	semi attractive	intermediate	almost intermediate	semi repulsive	almost repulsive	repulsive	super repulsive										

decrease interactions
increase interactions

New beads

Current Name replacements:

Qda -> Q1
Qd -> Qp
Qa -> Qn
Nda -> N3/N2/N1
Na -> N3a/N2a/N2a
Nd -> N3d/N2d/N1d