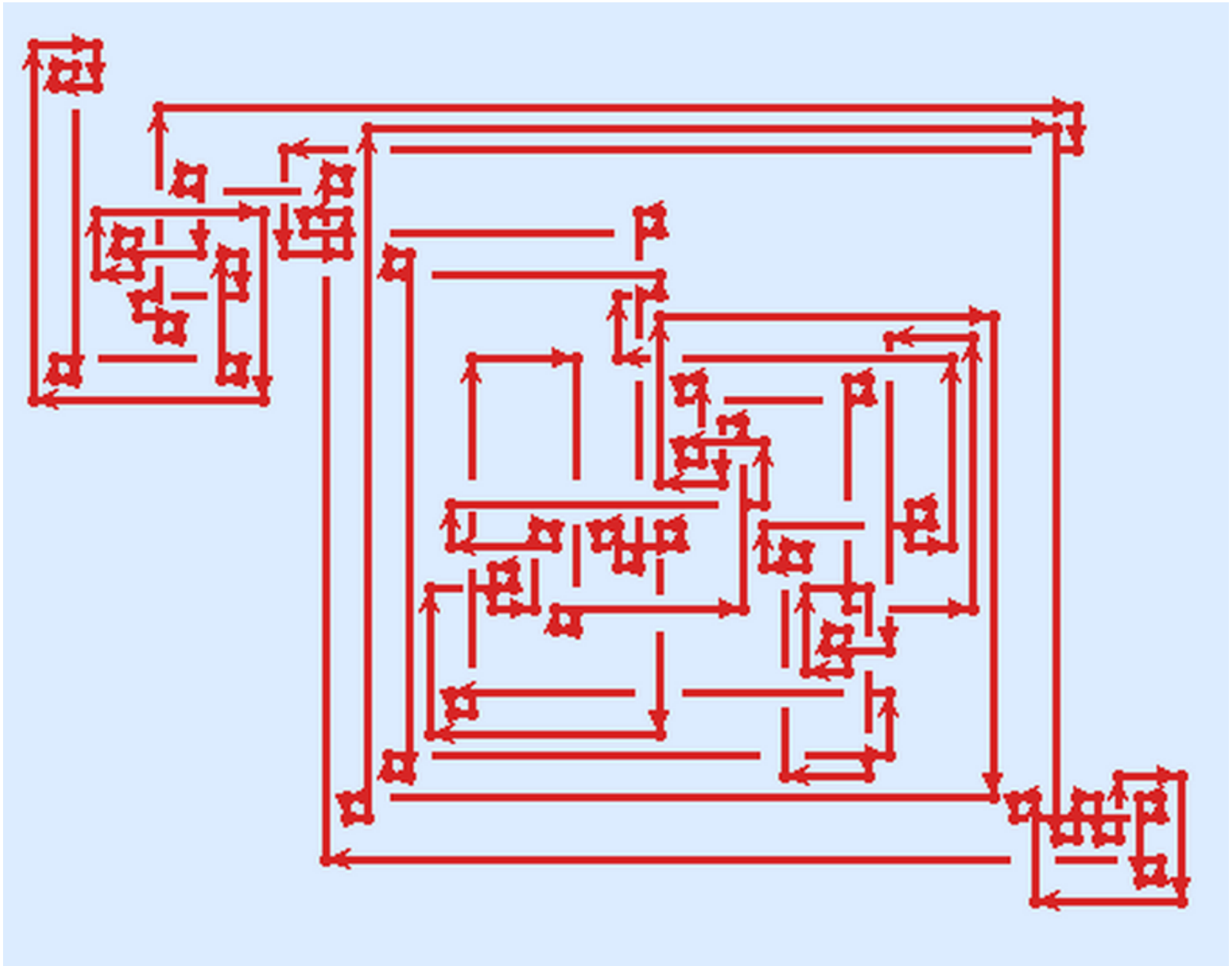
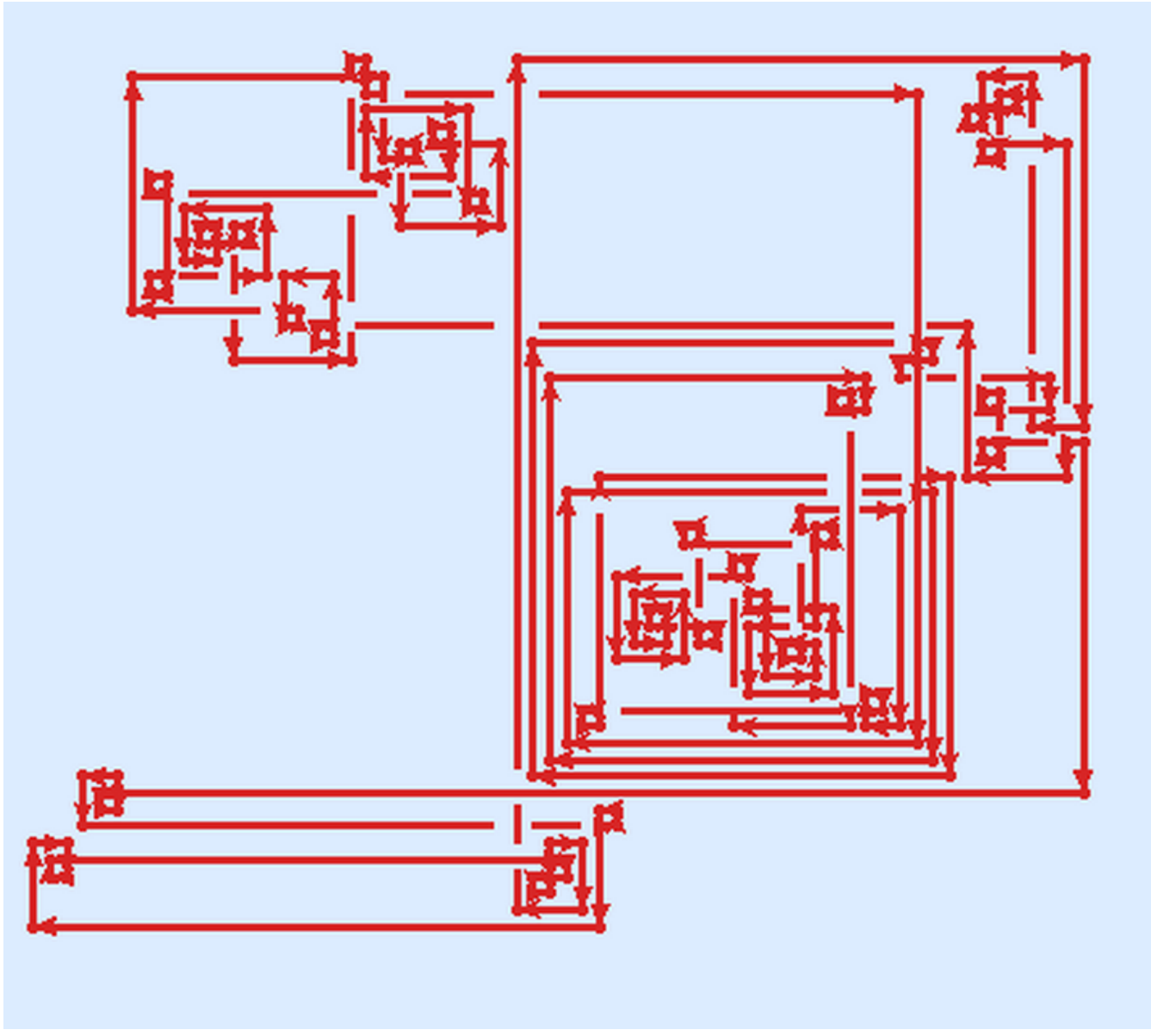
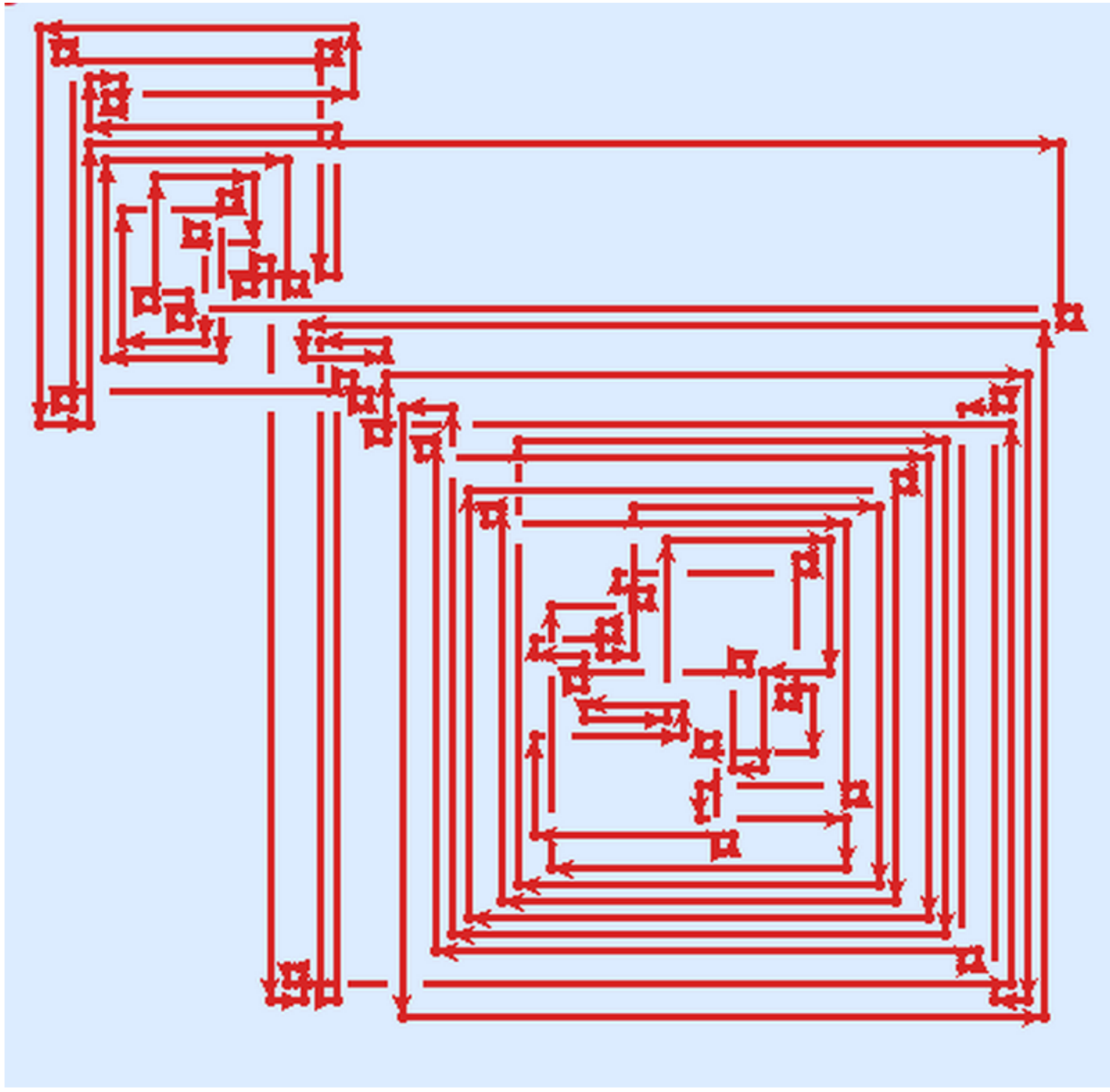
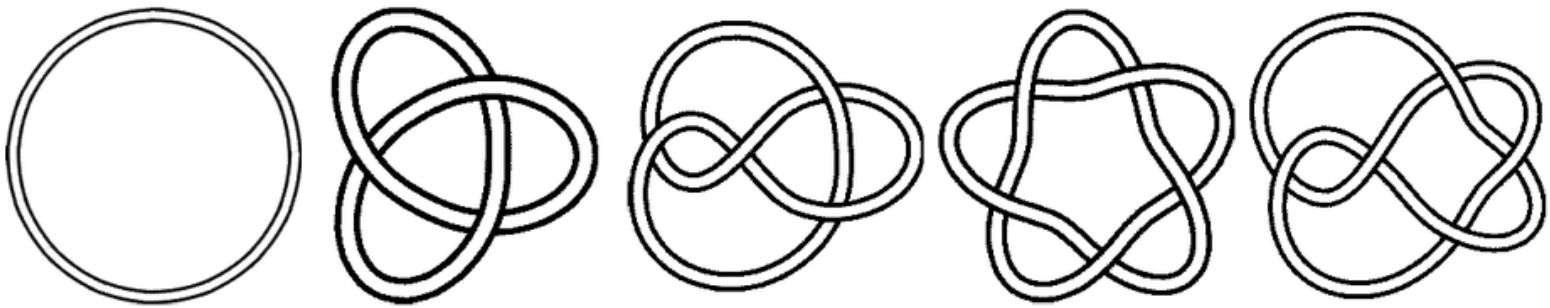
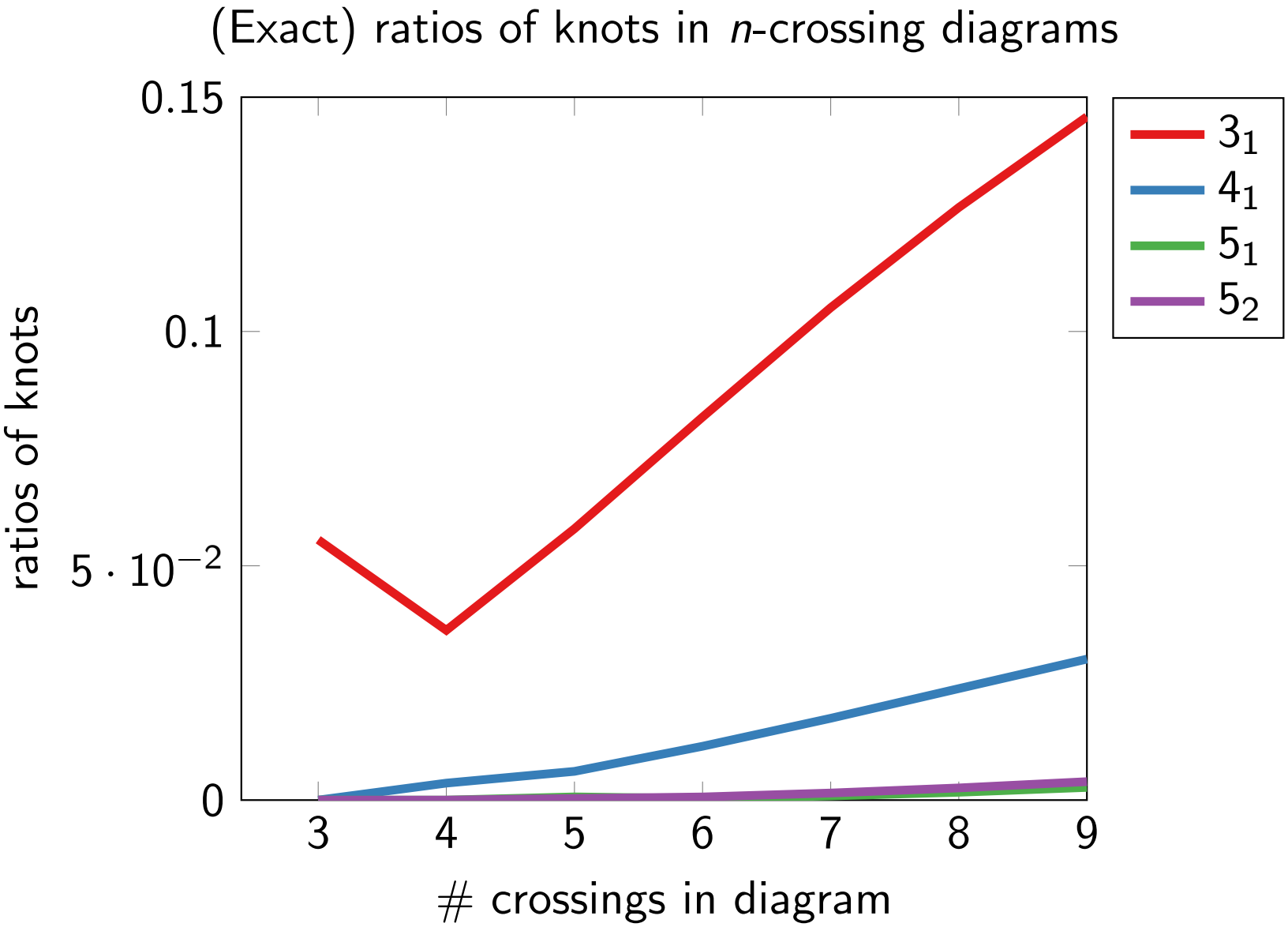




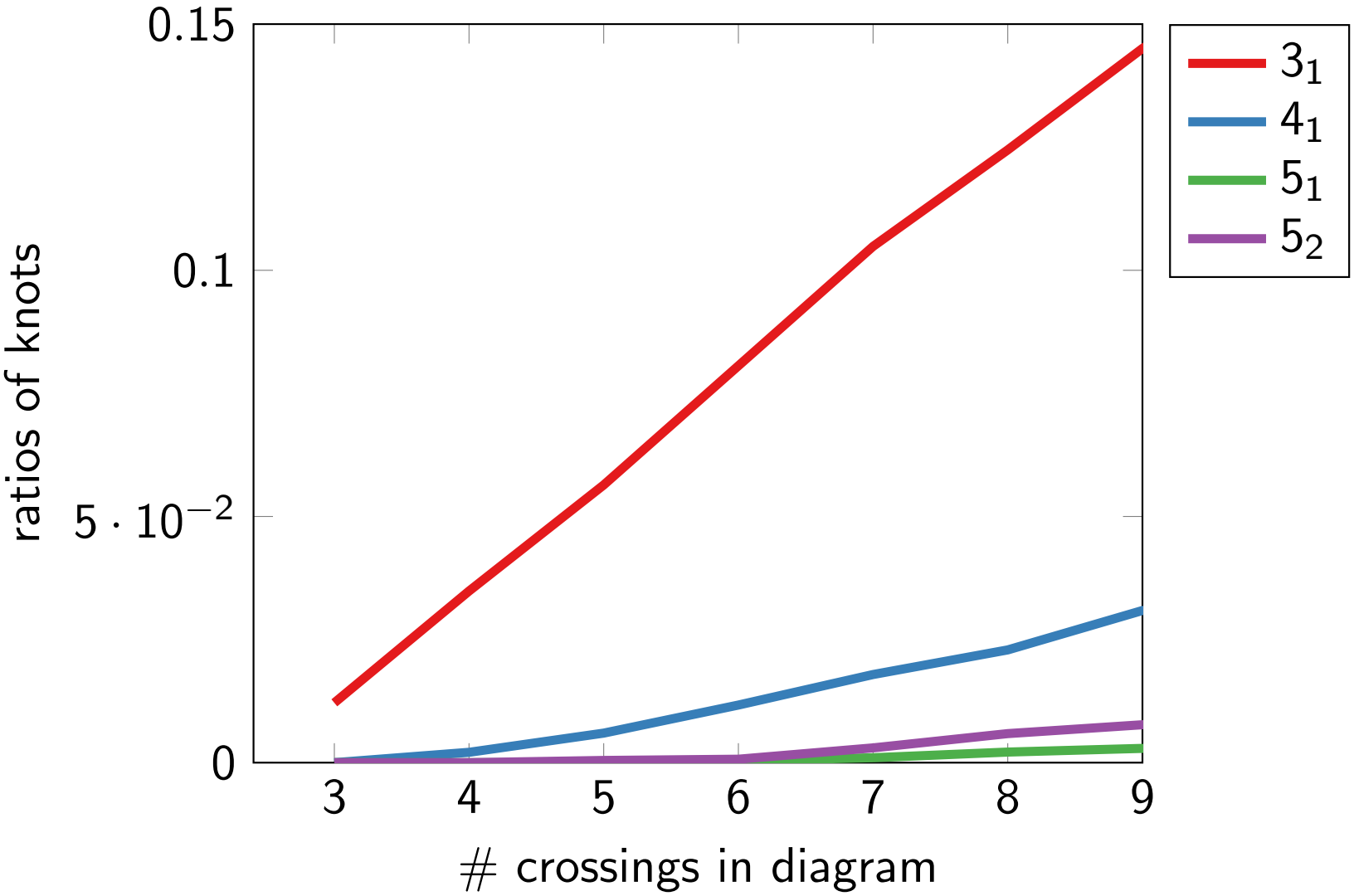


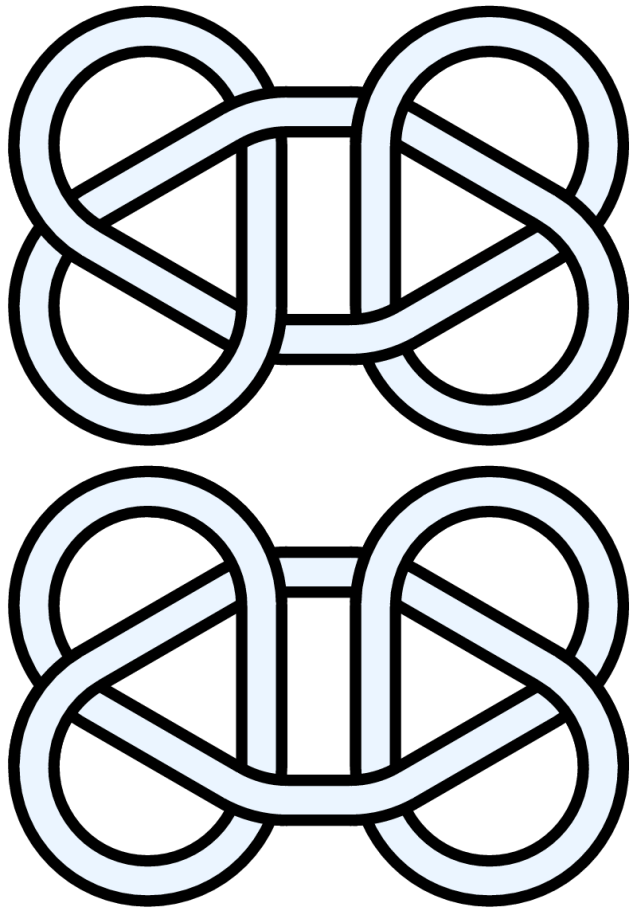


0_1 3_1 4_1 5_1 5_2

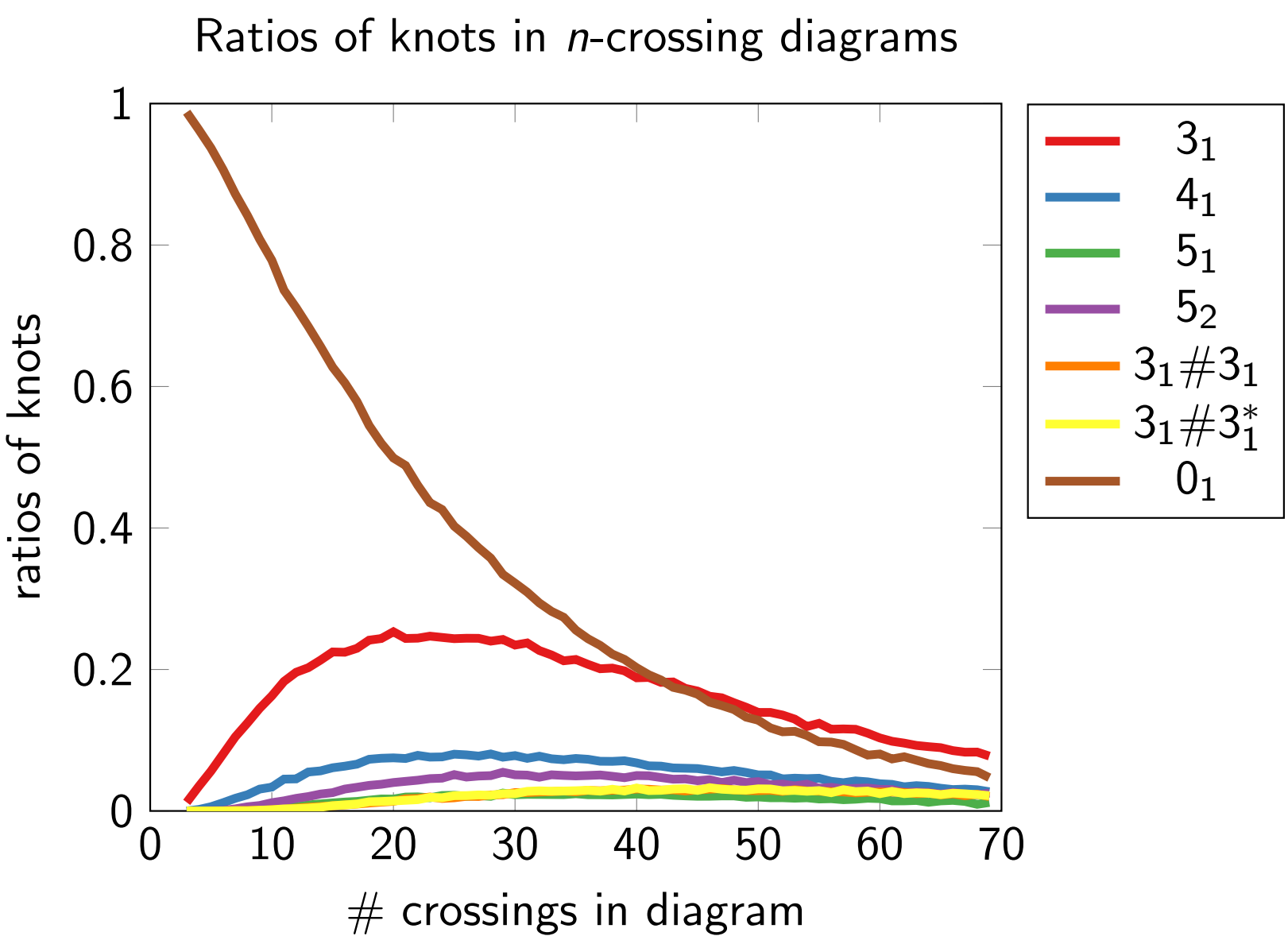

(Exact) ratios of knots in n-crossing diagrams
ratios of knots
0.15
0.1
$5 \cdot 10^{-2}$
0
3
4
5
6
7
8
9
crossings in diagram
3_1
4_1
5_1
5_2

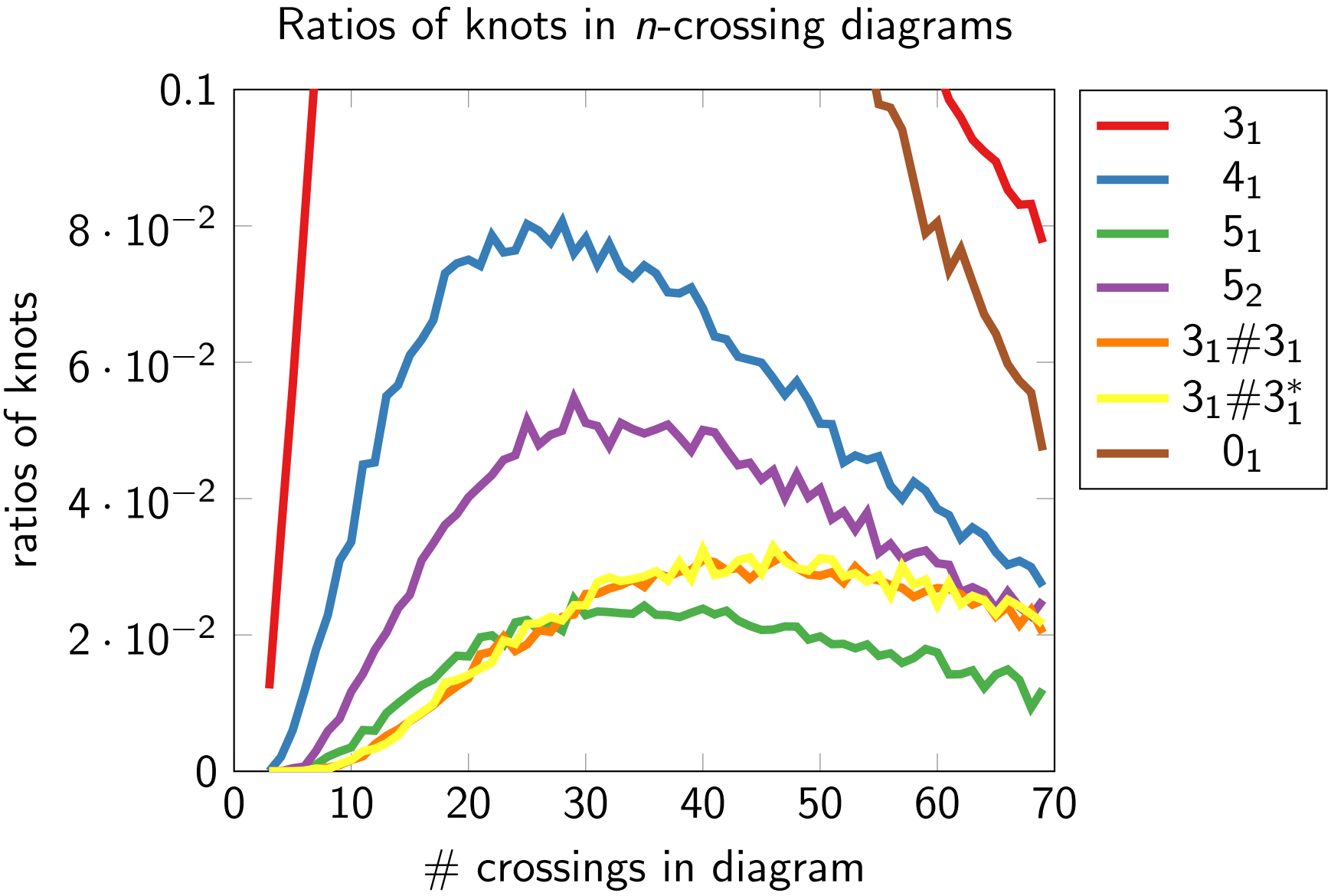
(Experimental) ratios of knots in n-crossing (rooted) diagrams

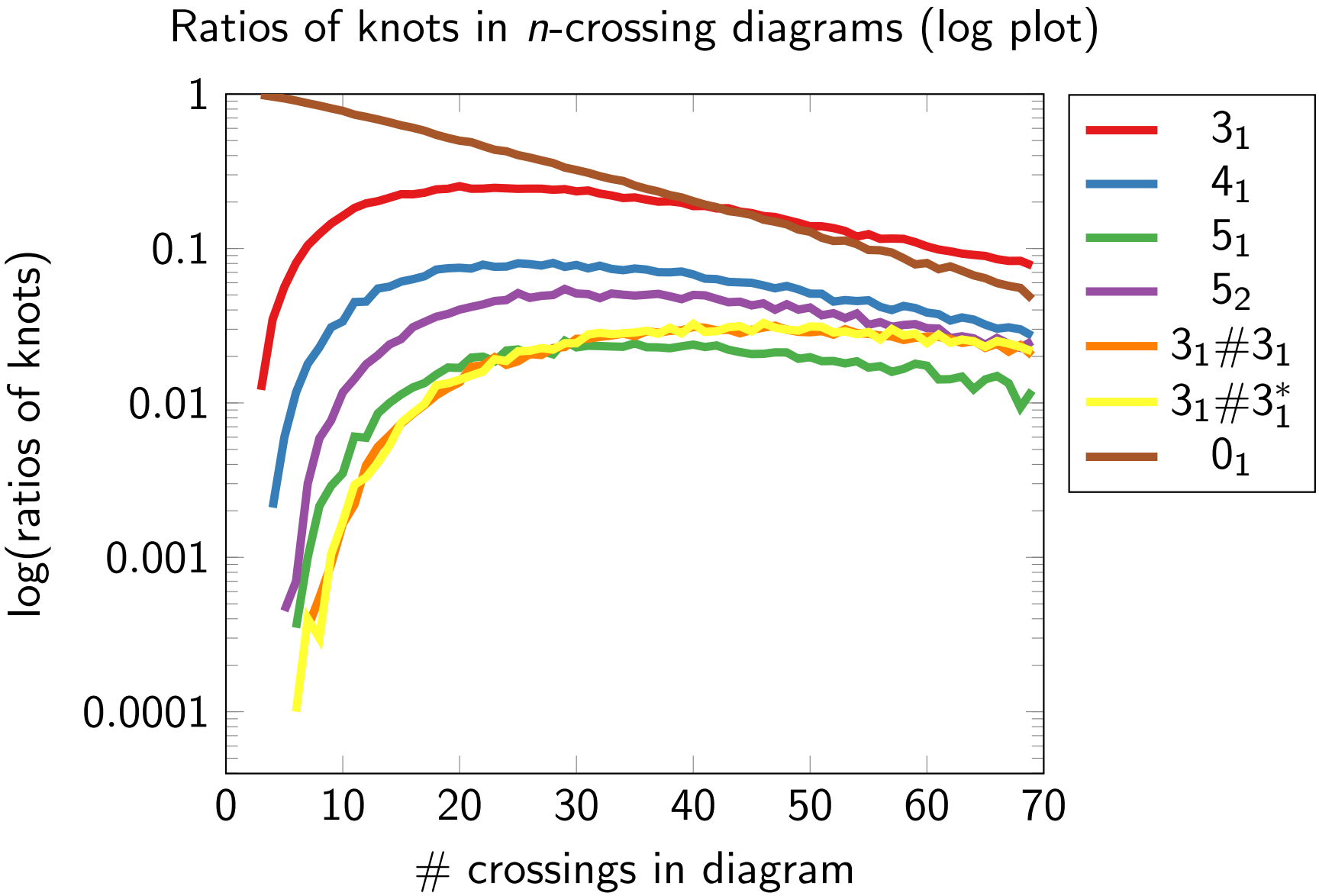


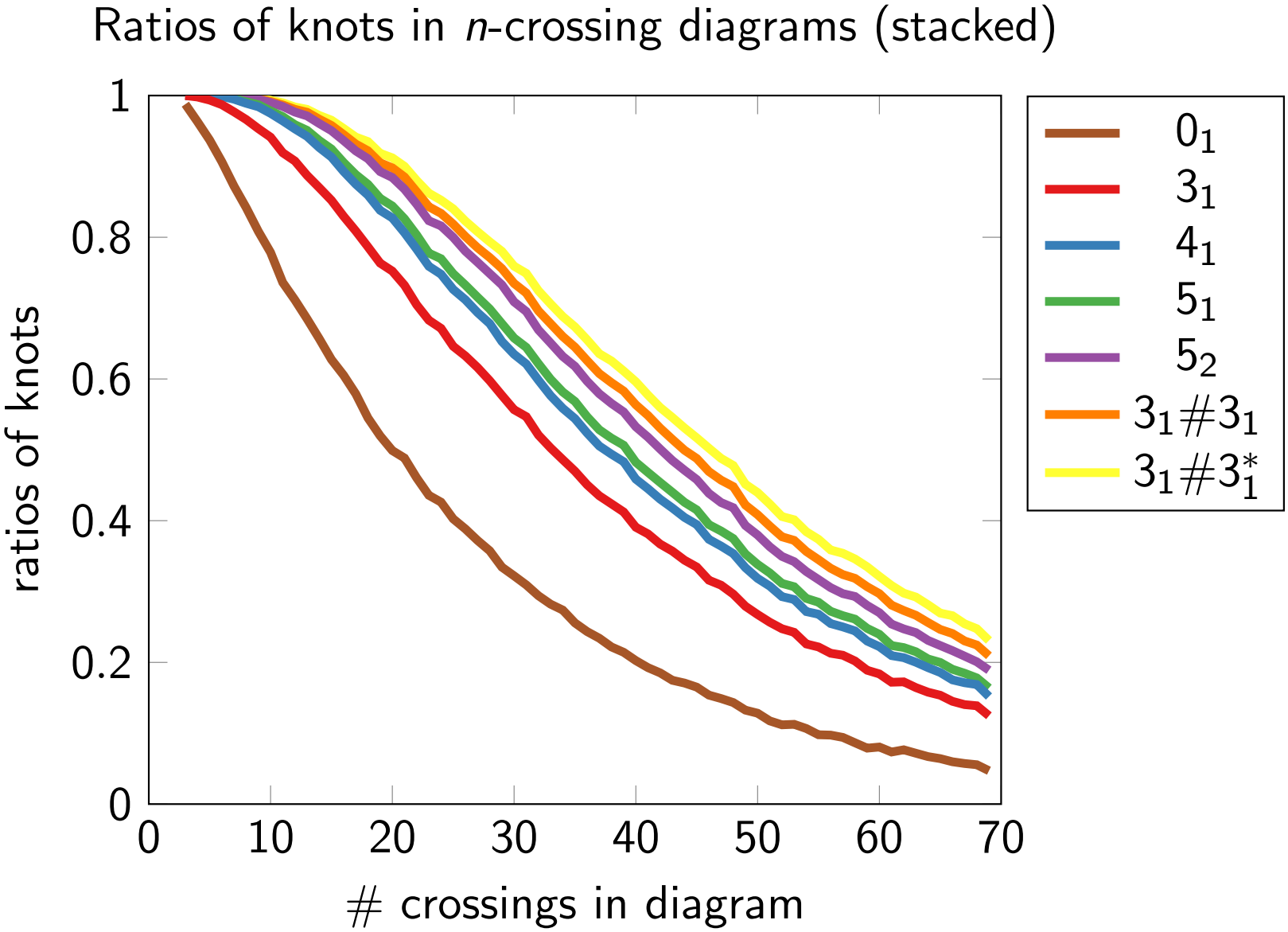
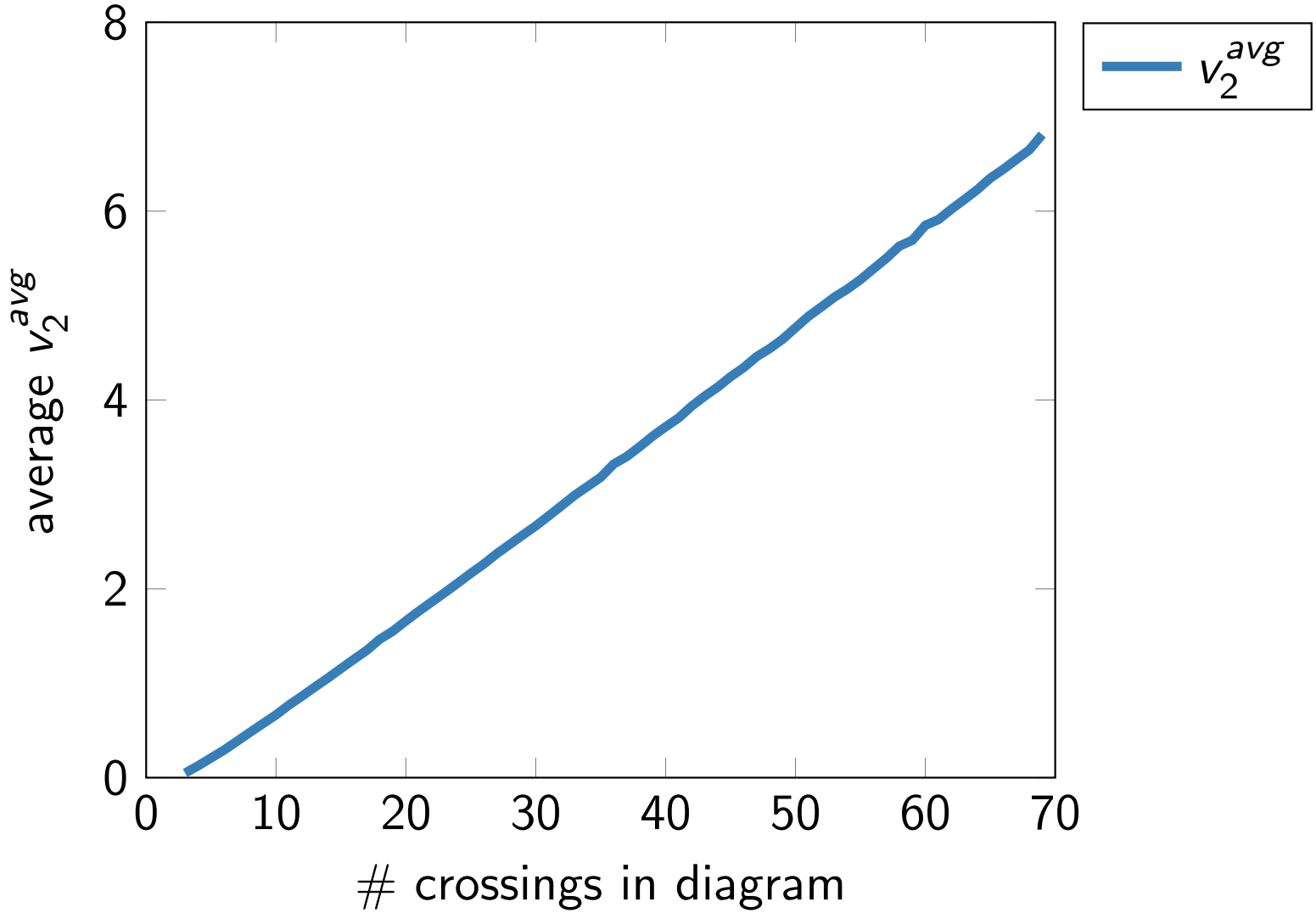


Granny knot $3_1\#3_1$ (top) vs square knot $3_1\#3_1^*$ (bottom)


Ratios of knots in n-crossing diagrams
ratios of knots
crossings in diagram
0
0.2
0.4
0.6
0.8
1
0
10
20
30
40
50
60
70
3_1
4_1
5_1
5_2
$3_1\#3_1$
$3_1\#3_1^*$
0_1


Ratios of knots in n-crossing diagrams
ratios of knots
0.1
$8 \cdot 10^{-2}$
$6 \cdot 10^{-2}$
$4 \cdot 10^{-2}$
$2 \cdot 10^{-2}$
0
0
10
20
30
40
50
60
70
crossings in diagram
3_1
4_1
5_1
5_2
$3_1 \# 3_1$
$3_1 \# 3_1^*$
0_1


Ratios of knots in n-crossing diagrams (log plot)
log(ratios of knots)
1
0.1
0.01
0.001
0.0001
0
10
20
30
40
50
60
70
crossings in diagram
3_1
4_1
5_1
5_2
$3_1\#3_1$
$3_1\#3_1^*$
0_1


Ratios of knots in n-crossing diagrams (stacked)
ratios of knots
crossings in diagram
0
0.2
0.4
0.6
0.8
1
0
10
20
30
40
50
60
70
0_1
3_1
4_1
5_1
5_2
$3_1\#3_1$
$3_1\#3_1^*$

Average Vassiliev-2 invariant for n crossing immersions $S^1 \hookrightarrow S^3$