Summary

October 9, 2023

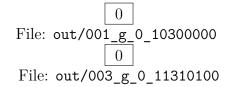
Contents

0.1	Loade	Graphs	3
	0.1.1	Goal	3
	0.1.2	Start	3
0.2	Loade	Rules	3
	0.2.1	Mark for conversion	3
	0.2.2	Remove R Nodes	5
	0.2.3	Reattach External Edges	5
	0.2.4	Remove attached edge	6
	0.2.5	Remove Inter R-Node Edges	6
	0.2.6	DG Hyper, dg_0	7
0.3	Produ	t Graphs	8
	0.3.1	p_{0,0}	8
	0.3.2	p_{0,1}	8
	0.3.3	p_{0,2}	9
	0.3.4	p_{0,3}	9
	0.3.5	p_{0,4}	10
	0.3.6	p_{0,5}	10
	0.3.7	p_{0,6}	11
	0.3.8	p_{0,7}	11
	0.3.9	p_{0,8}	12
		p_{0,9}	12
		p_{0,10}	13
		p_{0,11}	13
		1 = · / ·	14
		p_{0,13}	14
		p_{0,14}	15
		p_{0,15}	15
		p_{0,16}	15
		p_{0,17}	16
		p_{0,18}	16
		1 = · · ·	17
		1 = 2 / 2	17
		p_{0,21}	17
		p_{0,22}	18
		p_{0,23}	18
		p_{0,24}	19
		p_{0,25}	19
		p_{0,26}	19
		p_{0,27}	20
		p_{0,28}	20
	0.3.30	σ {0.29}	20

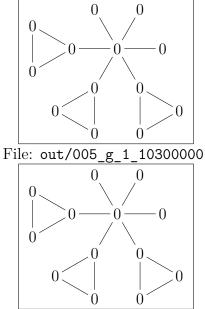
	0.3.31 p_{0,30}	21
0.4	Contracted Move Space	22
	0.4.1 DG Hyper, dg_1	22
0.5	Flow Solutions, id 0	23
	0.5.1 Solution 0	23

0.1 Loaded Graphs

0.1.1 Goal



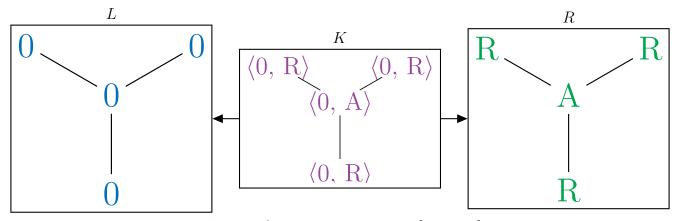
0.1.2 Start



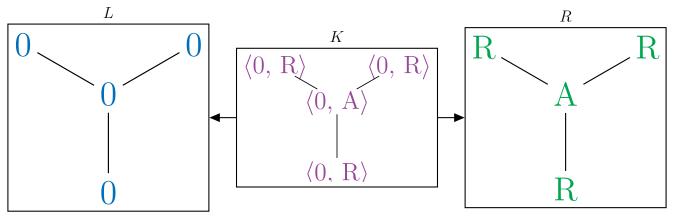
File: out/007_g_1_11310100

0.2 Loaded Rules

0.2.1 Mark for conversion



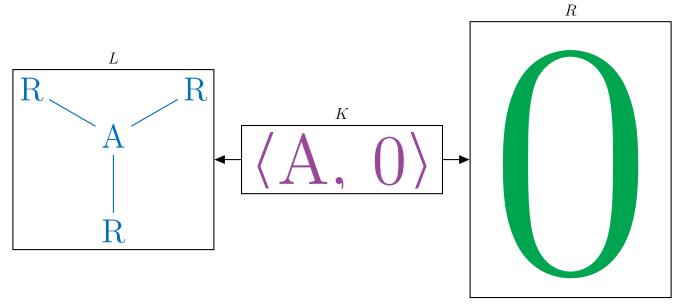
Files: out/009_r_0_10300000_{L, K, R}



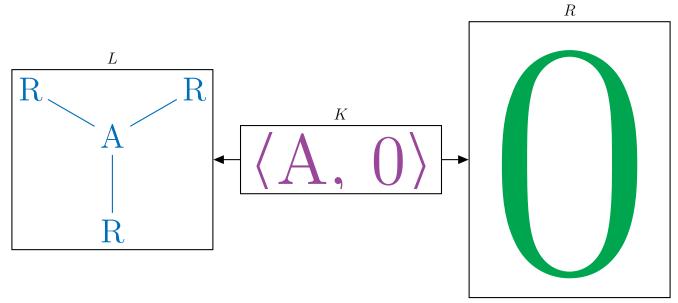
Files: out/011_r_0_11300100_{L, K, R}

```
|\{e \in \text{outEdges}(0)\}| = 3
|\{e \in \text{outEdges}(0) \mid \text{label}(\text{target}(e)) \in \{\text{`0'}\}\}
|\{e \in \text{outEdges}(1) \mid \text{label}(\text{target}(e)) \in \{\text{`R', `A'}\}\}
|\{e \in \text{outEdges}(2) \mid \text{label}(\text{target}(e)) \in \{\text{`R', `A'}\}\}
|\{e \in \text{outEdges}(2) \mid \text{label}(\text{target}(e)) \in \{\text{`R', `A'}\}\}
|\{e \in \text{outEdges}(3) \mid \text{label}(\text{target}(e)) \in \{\text{`R', `A'}\}\}
|\{e \in \text{outEdges}(3) \mid \text{label}(\text{target}(e)) \in \{\text{`R', `A'}\}\}
|\{e \in \text{outEdges}(3) \mid \text{label}(\text{target}(e)) \in \{\text{`R', `A'}\}\}
```

0.2.2 Remove R Nodes

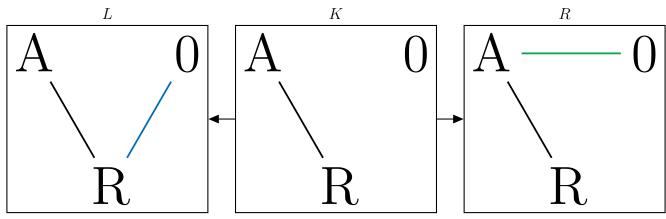


Files: out/014_r_1_10300000_{L, K, R}

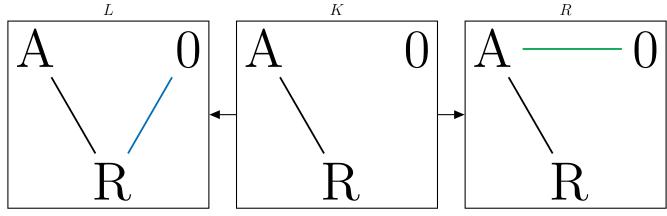


Files: out/016_r_1_11300100_{L, K, R}

0.2.3 Reattach External Edges

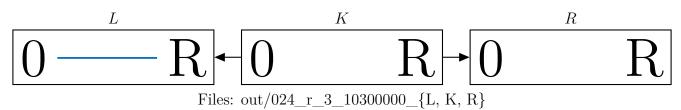


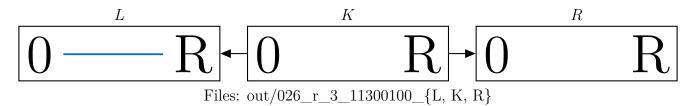
Files: out/019_r_2_10300000_{L, K, R}



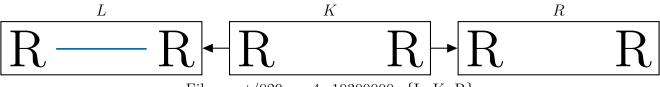
Files: $out/021_r_2_11300100_{L, K, R}$

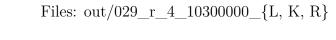
0.2.4 Remove attached edge

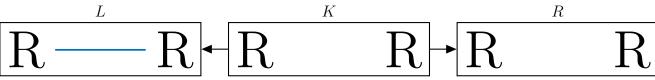




0.2.5 Remove Inter R-Node Edges

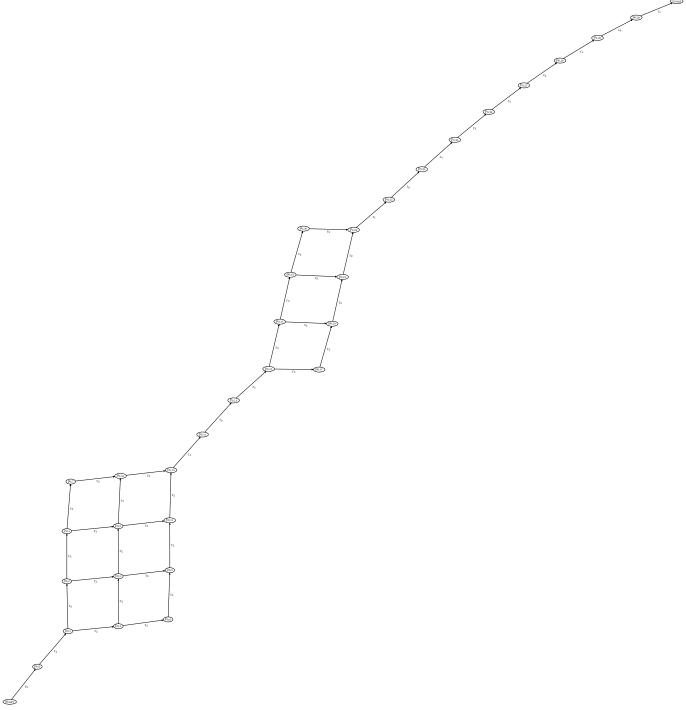






Files: out/031_r_4_11300100_{L, K, R}

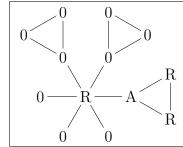
0.2.6 DG Hyper, dg_0



File: out/034_dg_0_10100

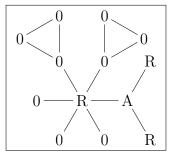
0.3 Product Graphs

$0.3.1 p_{0.0}$



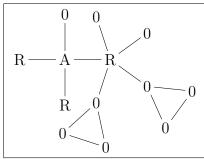
File: out/038_g_2_11310100

0.3.2 p_{0,1}

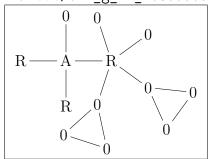


File: out/042_g_20_11310100

$0.3.3 p_{0,2}$

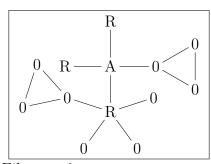


File: out/044_g_22_10300000

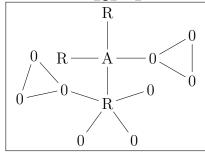


File: out/046_g_22_11310100

0.3.4 p_{0,3}

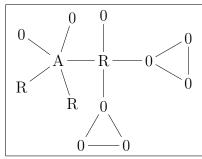


File: out/048_g_25_10300000

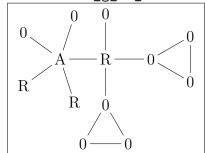


 $File: \ out/050_g_25_11310100$

$0.3.5 p_{0,4}$

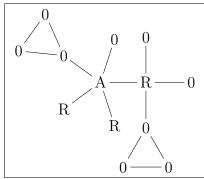


File: out/052_g_27_10300000

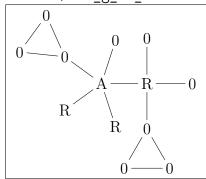


File: out/054_g_27_11310100

0.3.6 p_{0,5}

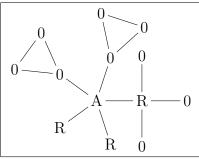


File: out/056_g_29_10300000

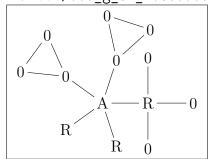


 $File: \ out/058_g_29_11310100$

0.3.7 p_{0,6}

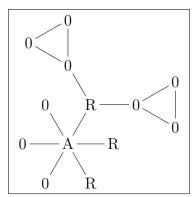


File: out/060_g_34_10300000

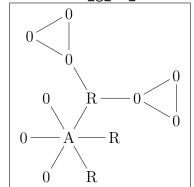


File: out/062_g_34_11310100

$0.3.8 p_{0.7}$

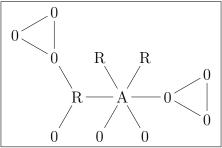


File: out/064_g_35_10300000

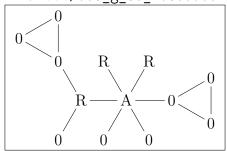


 $File: \ \mathtt{out/066_g_35_11310100}$

$0.3.9 p_{0.8}$

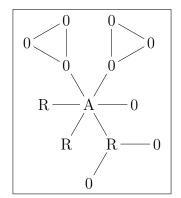


File: out/068_g_36_10300000

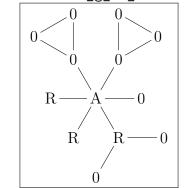


File: out/070_g_36_11310100

$0.3.10 p_{0.9}$

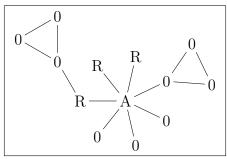


File: out/072_g_40_10300000

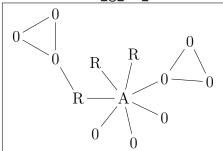


File: out/074_g_40_11310100

$0.3.11 p_{0.10}$

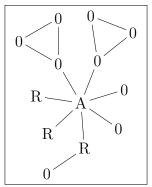


File: out/076_g_44_10300000

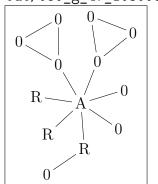


File: out/078_g_44_11310100

$0.3.12 p_{0.11}$

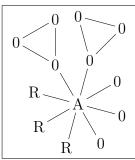


File: out/080_g_47_10300000

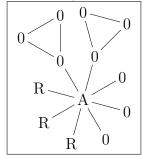


File: out/082_g_47_11310100

$0.3.13 p_{0.12}$

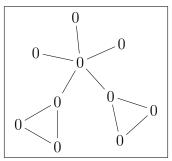


File: out/084_g_50_10300000

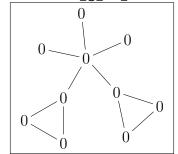


File: out/086_g_50_11310100

$0.3.14 p_{0.13}$

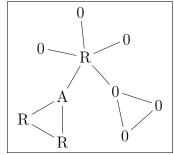


File: out/088_g_52_10300000

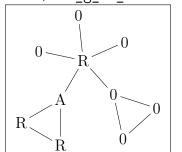


File: out/090_g_52_11310100

$0.3.15 p_{0.14}$

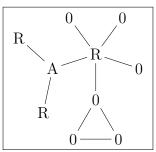


File: out/092_g_58_10300000

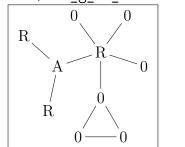


File: out/094_g_58_11310100

0.3.16 p_{0,15}

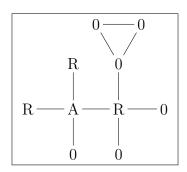


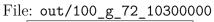
File: out/096_g_70_10300000

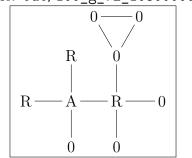


File: out/098_g_70_11310100

0.3.17 p_{0,16}

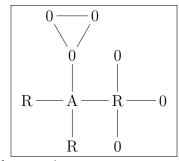


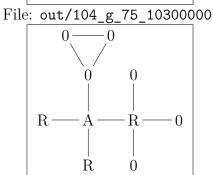




File: out/102_g_72_11310100

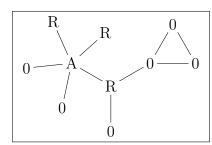
$0.3.18 p_{0,17}$



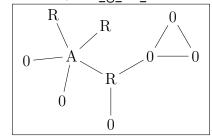


File: out/106_g_75_11310100

$0.3.19 p_{0.18}$

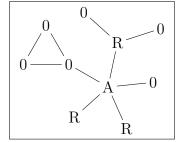


File: out/108_g_76_10300000

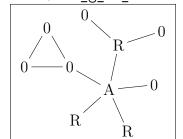


File: out/110_g_76_11310100

$0.3.20 p_{0.19}$

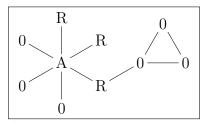


File: out/112_g_78_10300000

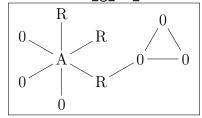


File: out/114_g_78_11310100

$0.3.21 p_{0.20}$

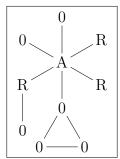


File: out/116_g_82_10300000

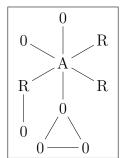


File: out/118_g_82_11310100

0.3.22 p_{0,21}

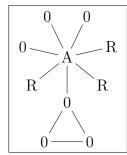


File: out/120_g_83_10300000

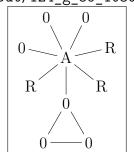


File: out/122_g_83_11310100

0.3.23 p_{0,22}

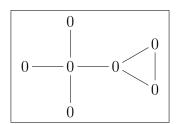


File: out/124_g_86_10300000

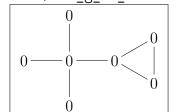


File: out/126_g_86_11310100

 $0.3.24 p_{0.33}$

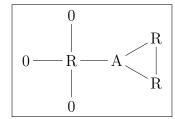


File: out/128_g_88_10300000

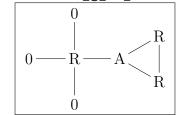


File: out/130_g_88_11310100

$0.3.25 p_{0.24}$

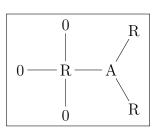


File: out/132_g_94_10300000

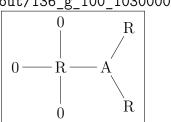


File: out/134_g_94_11310100

$0.3.26 p_{0,25}$

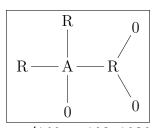


File: out/136_g_100_10300000

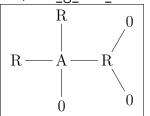


File: out/138_g_100_11310100

0.3.27 p_{0,26}

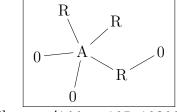


File: out/140_g_102_10300000

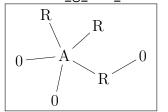


File: out/142_g_102_11310100

$0.3.28 p_{0.27}$

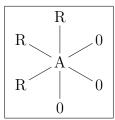


File: out/144_g_105_10300000

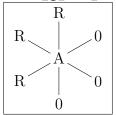


File: out/146_g_105_11310100

$0.3.29 p_{0.328}$

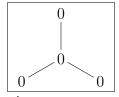


File: out/148_g_107_10300000

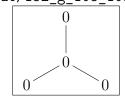


File: out/150_g_107_11310100

$0.3.30 p_{0.29}$

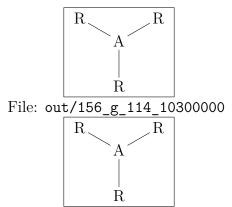


File: $out/152_g_108_10300000$



File: out/154_g_108_11310100

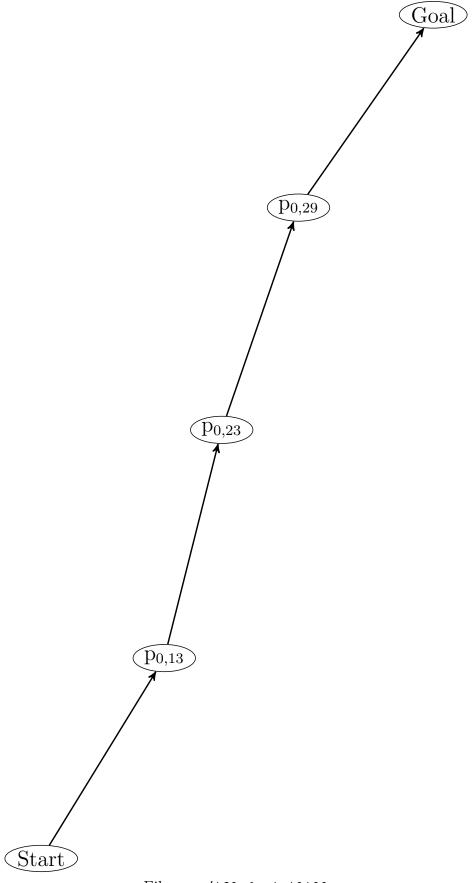
$0.3.31 p_{0.30}$



File: out/158_g_114_11310100

0.4 Contracted Move Space

0.4.1 DG Hyper, dg_1



 $File: \ \mathtt{out/160_dg_1_10100}$

0.5 Flow Solutions, id 0

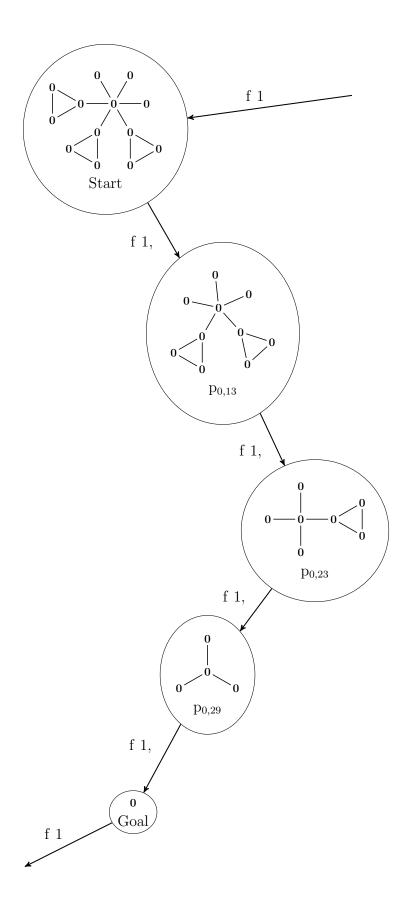
0.5.1 Solution 0

Overall Data

Objective value (integral): 5 Vertex/Graph In Out Goal 0 1

Start 1 0

Filtered Graph



 $File: \ \mathtt{out/169_dg_1_11100_f_0_0_filt}$