

$U_4(3).4 \pmod{5}$

	blocks	defect	matrix
$G :$	1	1	5×4
	2	1	5×4
	3	1	5×4
	$4 = \overline{2}$	1	5×4
	5	0	$70_1 = \chi_{3,0+}, \varphi_{3,0+}$
	6	0	$70_2 = \chi_{3,1+}, \varphi_{3,1+}$
	7	0	$90_1 = \chi_{5,0}, \varphi_{5,0}$
	8	0	$90_2 = \chi_{5,1}, \varphi_{5,1}$
	9	0	$90_3 = \chi_{5,2}, \varphi_{5,2}$
	$10 = \overline{8}$	0	$90_4 = \chi_{5,3}, \varphi_{5,3}$
	11	0	$140_1 = \chi_{6,0}, \varphi_{6,0}$
	12	0	$140_2 = \chi_{6,1}, \varphi_{6,1}$
	13	0	$140_3 = \chi_{6,2}, \varphi_{6,2}$
	$14 = \overline{12}$	0	$140_4 = \chi_{6,3}, \varphi_{6,3}$
	15	0	$210_1 = \chi_{8,0}, \varphi_{8,0}$
	16	0	$210_2 = \chi_{8,1}, \varphi_{8,1}$
	17	0	$210_3 = \chi_{8,2}, \varphi_{8,2}$
	$18 = \overline{16}$	0	$210_4 = \chi_{8,3}, \varphi_{8,3}$
	19	0	$1120_1 = \chi_{9+}, \varphi_{9+}$
	20	0	$630_1 = \chi_{13,0+}, \varphi_{13,0+}$
	21	0	$630_2 = \chi_{13,1+}, \varphi_{13,1+}$
	22	0	$420_1 = \chi_{15,0}, \varphi_{15,0}$
	23	0	$420_2 = \chi_{15,1}, \varphi_{15,1}$
	24	0	$420_3 = \chi_{15,2}, \varphi_{15,2}$
	$25 = \overline{23}$	0	$420_4 = \chi_{15,3}, \varphi_{15,3}$
	26	0	$560_1 = \chi_{16,0}, \varphi_{16,0}$
	27	0	$560_2 = \chi_{16,1}, \varphi_{16,1}$
	$28 = \overline{27}$	0	$560_3 = \chi_{16,2}, \varphi_{16,2}$
	$29 = \overline{26}$	0	$560_4 = \chi_{16,3}, \varphi_{16,3}$
	30	0	$640_1 = \chi_{17,0}, \varphi_{17,0}$
	31	0	$640_2 = \chi_{17,1}, \varphi_{17,1}$
	32	0	$640_3 = \chi_{17,2}, \varphi_{17,2}$
	33	0	$640_4 = \chi_{17,3}, \varphi_{17,3}$
	$34 = \overline{30}$	0	$640_5 = \chi_{18,0}, \varphi_{18,0}$
	$35 = \overline{33}$	0	$640_6 = \chi_{18,1}, \varphi_{18,1}$
	$36 = \overline{32}$	0	$640_7 = \chi_{18,2}, \varphi_{18,2}$
	$37 = \overline{31}$	0	$640_8 = \chi_{18,3}, \varphi_{18,3}$
$2.G :$	38	0	$20_1 = \chi_{21,0}, \varphi_{20,0}$
	39	0	$20_2 = \chi_{21,1}, \varphi_{20,1}$
	40	0	$20_3 = \chi_{21,2}, \varphi_{20,2}$

	blocks	defect	matrix
	$41 = \overline{39}$	0	$20_4 = \chi_{21,3}, \varphi_{20,3}$
	42	1	4×2
	$43 = \overline{42}$	1	4×2
	44	0	$70_3 = \chi_{24,0}, \varphi_{23,0}$
	45	0	$70_4 = \chi_{24,1}, \varphi_{23,1}$
	$46 = \overline{45}$	0	$70_5 = \chi_{24,2}, \varphi_{23,2}$
	$47 = \overline{44}$	0	$70_6 = \chi_{24,3}, \varphi_{23,3}$
	48	0	$280_1 = \chi_{25+}, \varphi_{24+}$
	49	0	$120_1 = \chi_{29,0}, \varphi_{28,0}$
	50	0	$120_2 = \chi_{29,1}, \varphi_{28,1}$
	51	0	$120_3 = \chi_{29,2}, \varphi_{28,2}$
	$52 = \overline{50}$	0	$120_4 = \chi_{29,3}, \varphi_{28,3}$
	53	0	$210_5 = \chi_{30,0}, \varphi_{29,0}$
	54	0	$210_6 = \chi_{30,1}, \varphi_{29,1}$
	55	0	$210_7 = \chi_{30,2}, \varphi_{29,2}$
	56	0	$210_8 = \chi_{30,3}, \varphi_{29,3}$
	$57 = \overline{53}$	0	$210_9 = \chi_{31,0}, \varphi_{30,0}$
	$58 = \overline{56}$	0	$210_{10} = \chi_{31,1}, \varphi_{30,1}$
	$59 = \overline{55}$	0	$210_{11} = \chi_{31,2}, \varphi_{30,2}$
	$60 = \overline{54}$	0	$210_{12} = \chi_{31,3}, \varphi_{30,3}$
	61	0	$540_1 = \chi_{34,0}, \varphi_{33,0}$
	62	0	$540_2 = \chi_{34,1}, \varphi_{33,1}$
	63	0	$540_3 = \chi_{34,2}, \varphi_{33,2}$
	$64 = \overline{62}$	0	$540_4 = \chi_{34,3}, \varphi_{33,3}$
	65	0	$560_5 = \chi_{35,0}, \varphi_{34,0}$
	66	0	$560_6 = \chi_{35,1}, \varphi_{34,1}$
	$67 = \overline{66}$	0	$560_7 = \chi_{35,2}, \varphi_{34,2}$
	$68 = \overline{65}$	0	$560_8 = \chi_{35,3}, \varphi_{34,3}$
	69	0	$630_3 = \chi_{36,0}, \varphi_{35,0}$
	70	0	$630_4 = \chi_{36,1}, \varphi_{35,1}$
	$71 = \overline{70}$	0	$630_5 = \chi_{36,2}, \varphi_{35,2}$
	$72 = \overline{69}$	0	$630_6 = \chi_{36,3}, \varphi_{35,3}$
	73	0	$640_9 = \chi_{37,0}, \varphi_{36,0}$
	74	0	$640_{10} = \chi_{37,1}, \varphi_{36,1}$
	75	0	$640_{11} = \chi_{37,2}, \varphi_{36,2}$
	76	0	$640_{12} = \chi_{37,3}, \varphi_{36,3}$
	$77 = \overline{73}$	0	$640_{13} = \chi_{38,0}, \varphi_{37,0}$
	$78 = \overline{76}$	0	$640_{14} = \chi_{38,1}, \varphi_{37,1}$
	$79 = \overline{75}$	0	$640_{15} = \chi_{38,2}, \varphi_{37,2}$
	$80 = \overline{74}$	0	$640_{16} = \chi_{38,3}, \varphi_{37,3}$

	blocks	defect	matrix
4.G :	81	0	$20_5 = \chi_{40,0}, \varphi_{38,0}$
	82	0	$20_6 = \chi_{40,1}, \varphi_{38,1}$
	83	0	$20_7 = \chi_{40,2}, \varphi_{38,2}$
	84	0	$20_8 = \chi_{40,3}, \varphi_{38,3}$
	85 = 81*		
	86 = 84*		
	87 = 83*		
	88 = 82*		
	89	0	$120_5 = \chi_{41,0}, \varphi_{39,0}$
	90	0	$120_6 = \chi_{41,1}, \varphi_{39,1}$
	91	0	$120_7 = \chi_{41,2}, \varphi_{39,2}$
	92	0	$120_8 = \chi_{41,3}, \varphi_{39,3}$
	93 = 89*		
	94 = 92*		
	95 = 91*		
	96 = 90*		
	97	0	$140_5 = \chi_{42,0}, \varphi_{40,0}$
	98	0	$140_6 = \chi_{42,1}, \varphi_{40,1}$
	99	0	$140_7 = \chi_{42,2}, \varphi_{40,2}$
	100	0	$140_8 = \chi_{42,3}, \varphi_{40,3}$
101 = 97*			
102 = 100*			
103 = 99*			
104 = 98*			
105	1	5×1	
106 = 105*			
107	0	$280_2 = \chi_{47,0}, \varphi_{45,0}$	
108	0	$280_3 = \chi_{47,1}, \varphi_{45,1}$	
109	0	$280_4 = \chi_{47,2}, \varphi_{45,2}$	
110	0	$280_5 = \chi_{47,3}, \varphi_{45,3}$	
111 = 107*			
112 = 110*			
113 = 109*			
114 = 108*			
115	0	$560_9 = \chi_{48,0+}, \varphi_{46,0+}$	
116	0	$560_{10} = \chi_{48,1+}, \varphi_{46,1+}$	
117 = 115*			
118 = 116*			
119	0	$420_5 = \chi_{50,0}, \varphi_{48,0}$	
120	0	$420_6 = \chi_{50,1}, \varphi_{48,1}$	

	blocks	defect	matrix
	121	0	$420_7 = \chi_{50,2}, \varphi_{48,2}$
	122	0	$420_8 = \chi_{50,3}, \varphi_{48,3}$
	123 = 119*		
	124 = 122*		
	125 = 121*		
	126 = 120*		
	127	0	$540_5 = \chi_{51,0}, \varphi_{49,0}$
	128	0	$540_6 = \chi_{51,1}, \varphi_{49,1}$
	129	0	$540_7 = \chi_{51,2}, \varphi_{49,2}$
	130	0	$540_8 = \chi_{51,3}, \varphi_{49,3}$
	131 = 127*		
	132 = 130*		
	133 = 129*		
	134 = 128*		
	135	0	$640_{17} = \chi_{52,0}, \varphi_{50,0}$
	136	0	$640_{18} = \chi_{52,1}, \varphi_{50,1}$
	137	0	$640_{19} = \chi_{52,2}, \varphi_{50,2}$
	138	0	$640_{20} = \chi_{52,3}, \varphi_{50,3}$
	139 = 135*		
	140 = 138*		
	141 = 137*		
	142 = 136*		
	143 = $\overline{139}$	0	$640_{25} = \chi_{53,0}, \varphi_{51,0}$
	144 = $\overline{142}$	0	$640_{26} = \chi_{53,1}, \varphi_{51,1}$
	145 = $\overline{141}$	0	$640_{27} = \chi_{53,2}, \varphi_{51,2}$
	146 = $\overline{140}$	0	$640_{28} = \chi_{53,3}, \varphi_{51,3}$
	147 = 143*		
	148 = 146*		
	149 = 145*		
	150 = 144*		
	151	0	$840_1 = \chi_{54,0}, \varphi_{52,0}$
	152	0	$840_2 = \chi_{54,1}, \varphi_{52,1}$
	153	0	$840_3 = \chi_{54,2}, \varphi_{52,2}$
	154	0	$840_4 = \chi_{54,3}, \varphi_{52,3}$
	155 = 151*		
	156 = 154*		
	157 = 153*		
	158 = 152*		

Block 1:	$\varphi_{1,0}$	$\varphi_{2,2}$	$\varphi_{7,0}$	$\varphi_{19,2}$
$1_1 = \chi_{1,0}$	1	.	.	.
$21_3 = \chi_{2,2}$	.	1	.	.
$189_1 = \chi_{7,0}$	1	.	1	.
$729_3 = \chi_{19,2}$	.	1	.	1
$896_3 = \chi_{20,2}$	.	.	1	1

$$\begin{aligned}\varphi_{1,0} &= 1_1 \\ \varphi_{2,2} &= 21_3 \\ \varphi_{7,0} &= 188_1 \\ \varphi_{19,2} &= 708_3\end{aligned}$$

Block 2:	$\varphi_{1,1}$	$\varphi_{2,3}$	$\varphi_{7,1}$	$\varphi_{19,3}$
$1_2 = \chi_{1,1}$	1	.	.	.
$21_4 = \chi_{2,3}$	.	1	.	.
$189_2 = \chi_{7,1}$	1	.	1	.
$729_4 = \chi_{19,3}$	.	1	.	1
$896_4 = \chi_{20,3}$	.	.	1	1

$$\begin{aligned}\varphi_{1,1} &= 1_2 \\ \varphi_{2,3} &= 21_4 \\ \varphi_{7,1} &= 188_2 \\ \varphi_{19,3} &= 708_4\end{aligned}$$

Block 3:	$\varphi_{1,2}$	$\varphi_{2,0}$	$\varphi_{7,2}$	$\varphi_{19,0}$
$1_3 = \chi_{1,2}$	1	.	.	.
$21_1 = \chi_{2,0}$	.	1	.	.
$189_3 = \chi_{7,2}$	1	.	1	.
$729_1 = \chi_{19,0}$	.	1	.	1
$896_1 = \chi_{20,0}$	.	.	1	1

$$\begin{aligned}\varphi_{1,2} &= 1_3 \\ \varphi_{2,0} &= 21_1 \\ \varphi_{7,2} &= 188_3 \\ \varphi_{19,0} &= 708_1\end{aligned}$$

Block 4:	$\varphi_{1,3}$	$\varphi_{2,1}$	$\varphi_{7,3}$	$\varphi_{19,1}$
$1_4 = \chi_{1,3}$	1	.	.	.
$21_2 = \chi_{2,1}$	.	1	.	.
$189_4 = \chi_{7,3}$	1	.	1	.
$729_2 = \chi_{19,1}$	.	1	.	1
$896_2 = \chi_{20,1}$	.	.	1	1

$$\begin{aligned}\varphi_{1,3} &= 1_4 \\ \varphi_{2,1} &= 21_2 \\ \varphi_{7,3} &= 188_4 \\ \varphi_{19,1} &= 708_2\end{aligned}$$

Block 42:	$\varphi_{21,0+}$	$\varphi_{31,0+}$
$112_1 = \chi_{22,0+}$	1	.
$1008_1 = \chi_{32,0+}$	1	1
$896_6 = \chi_{39,1}$	.	1
$896_8 = \chi_{39,3}$	.	1

$$\begin{aligned}\varphi_{21,0+} &= 112_1 \\ \varphi_{31,0+} &= 896_1\end{aligned}$$

Block 43:	$\varphi_{21,1+}$	$\varphi_{31,1+}$	
$112_2 = \chi_{22,1+}$	1	.	$\varphi_{21,1+} = 112_2$
$1008_2 = \chi_{32,1+}$	1	1	$\varphi_{31,1+} = 896_2$
$896_5 = \chi_{39,0}$	.	1	
$896_7 = \chi_{39,2}$	.	1	

Blocks 105, 106:	φ_{41+}	
$896_9 = \chi_{43+}$	1	
$896_{11} = \chi_{55,0}$	1	$\varphi_{41+} = 896_3$
$896_{12} = \chi_{55,1}$	1	
$896_{13} = \chi_{55,2}$	1	
$896_{14} = \chi_{55,3}$	1	