

$U_4(3).2_3 \pmod{5}$

	blocks	defect	matrix
$G :$	1	1	5×4
	2	1	5×4
	3	0	$70_1 = \chi_{3+}, \varphi_{3+}$
	4	0	$90_1 = \chi_{5,0}, \varphi_{5,0}$
	5	0	$90_2 = \chi_{5,1}, \varphi_{5,1}$
	6	0	$140_1 = \chi_{6,0}, \varphi_{6,0}$
	7	0	$140_2 = \chi_{6,1}, \varphi_{6,1}$
	8	0	$210_1 = \chi_{8,0}, \varphi_{8,0}$
	9	0	$210_2 = \chi_{8,1}, \varphi_{8,1}$
	10	0	$560_1 = \chi_{9+}, \varphi_{9+}$
	$11 = \overline{10}$	0	$560_2 = \chi_{10+}, \varphi_{10+}$
	12	0	$630_1 = \chi_{13+}, \varphi_{13+}$
	13	0	$420_1 = \chi_{15,0}, \varphi_{15,0}$
	14	0	$420_2 = \chi_{15,1}, \varphi_{15,1}$
	15	0	$560_3 = \chi_{16,0}, \varphi_{16,0}$
	$16 = \overline{15}$	0	$560_4 = \chi_{16,1}, \varphi_{16,1}$
	17	0	$1280_1 = \chi_{17+}, \varphi_{17+}$
$2.G :$	18	0	$20_1 = \chi_{21,0}, \varphi_{20,0}$
	$19 = \overline{18}$	0	$20_2 = \chi_{21,1}, \varphi_{20,1}$
	20	1	4×2
	21	0	$70_2 = \chi_{24,0}, \varphi_{23,0}$
	22	0	$70_3 = \chi_{24,1}, \varphi_{23,1}$
	23	0	$140_3 = \chi_{25+}, \varphi_{24+}$
	$24 = \overline{23}$	0	$140_4 = \chi_{26+}, \varphi_{25+}$
	25	0	$120_1 = \chi_{29,0}, \varphi_{28,0}$
	26	0	$120_2 = \chi_{29,1}, \varphi_{28,1}$
	27	0	$420_3 = \chi_{30+}, \varphi_{29+}$
	28	0	$540_1 = \chi_{34,0}, \varphi_{33,0}$
	$29 = \overline{28}$	0	$540_2 = \chi_{34,1}, \varphi_{33,1}$
	30	0	$560_5 = \chi_{35,0}, \varphi_{34,0}$
	31	0	$560_6 = \chi_{35,1}, \varphi_{34,1}$
	32	0	$630_2 = \chi_{36,0}, \varphi_{35,0}$
	33	0	$630_3 = \chi_{36,1}, \varphi_{35,1}$
34	0	$1280_2 = \chi_{37+}, \varphi_{36+}$	
$4.G :$	35	0	$40_1 = \chi_{40+}, \varphi_{38+}$
	36	0	$240_1 = \chi_{41+}, \varphi_{39+}$
	37	0	$280_1 = \chi_{42+}, \varphi_{40+}$
	38	1	5×4
	39	0	$560_7 = \chi_{47+}, \varphi_{45+}$
	40	0	$560_8 = \chi_{48+}, \varphi_{46+}$

	blocks	defect	matrix
	41 = $\overline{40}$	0	560 ₉ = $\chi_{49+}, \varphi_{47+}$
	42	0	840 ₁ = $\chi_{50+}, \varphi_{48+}$
	43	0	1080 ₁ = $\chi_{51+}, \varphi_{49+}$
	44	0	1280 ₃ = $\chi_{52+}, \varphi_{50+}$
	45	0	1280 ₄ = $\chi_{53+}, \varphi_{51+}$
	46	0	1680 ₁ = $\chi_{54+}, \varphi_{52+}$
$3_1.G :$	47	1	5×4
	48	1	5×4
	49 = 47*		
	50 = 48*		
	51	0	90 ₃ = $\chi_{100+}, \varphi_{94+}$
	52 = 51*		
	53	0	315 ₁ = $\chi_{104,0}, \varphi_{98,0}$
	54	0	315 ₂ = $\chi_{104,1}, \varphi_{98,1}$
	55 = 53*		
	56 = 54*		
	57	0	630 ₄ = $\chi_{105+}, \varphi_{99+}$
	58 = 57*		
	59	0	630 ₆ = $\chi_{107,0}, \varphi_{102,0}$
	60	0	630 ₇ = $\chi_{107,1}, \varphi_{102,1}$
	61 = 59*		
	62 = 60*		
	63	0	720 ₁ = $\chi_{108,0}, \varphi_{103,0}$
	64	0	720 ₂ = $\chi_{108,1}, \varphi_{103,1}$
	65 = 63*		
	66 = 64*		
	67	0	945 ₁ = $\chi_{111,0}, \varphi_{104,0}$
	68	0	945 ₂ = $\chi_{111,1}, \varphi_{104,1}$
	69 = 67*		
	70 = 68*		
$6_1.G :$	71	0	90 ₅ = $\chi_{112,0}, \varphi_{105,0}$
	72	0	90 ₆ = $\chi_{112,1}, \varphi_{105,1}$
	73 = 71*		
	74 = 72*		
	75	1	4×2
	76 = 75*		
	77	0	540 ₃ = $\chi_{117+}, \varphi_{110+}$
	78 = 77*		
	79	0	540 ₅ = $\chi_{120,0}, \varphi_{112,0}$
	80	0	540 ₆ = $\chi_{120,1}, \varphi_{112,1}$

	blocks	defect	matrix
	81 = 79* 82 = 80* 83 84 85 = 83* 86 = 84* 87 88 89 = 87* 90 = 88* 91 92 93 = 91* 94 = 92*	 0 0 0 0 0 0 0 0	 630 ₁₀ = $\chi_{121,0}, \varphi_{113,0}$ 630 ₁₁ = $\chi_{121,1}, \varphi_{113,1}$ 720 ₅ = $\chi_{122,0}, \varphi_{114,0}$ 720 ₆ = $\chi_{122,1}, \varphi_{114,1}$ 1260 ₁ = $\chi_{123,0}, \varphi_{115,0}$ 1260 ₂ = $\chi_{123,1}, \varphi_{115,1}$
12 ₁ .G :	95 96 = 95 * 5 97 98 = 97 * 5 99 = 97 * 7 100 = 97 * 11 101 102 = 101 * 5 103 104 = 103 * 5	1 0 0 0	5 × 4 720 ₉ = $\chi_{126+}, \varphi_{119+}$ 1080 ₂ = $\chi_{130+}, \varphi_{122+}$ 2520 ₁ = $\chi_{132+}, \varphi_{123+}$
3 ₂ .G :	105 106 107 = 105* 108 = 106* 109 110 = 109* 111 112 113 = 111* 114 = 112* 115 116 = 115* 117 118 119 = 117* 120 = 118*	1 1 0 0 0 0 0 0 0	5 × 4 5 × 4 90 ₃ = $\chi_{100+}, \varphi_{94+}$ 315 ₁ = $\chi_{104,0}, \varphi_{98,0}$ 315 ₂ = $\chi_{104,1}, \varphi_{98,1}$ 630 ₄ = $\chi_{105+}, \varphi_{99+}$ 630 ₆ = $\chi_{107,0}, \varphi_{102,0}$ 630 ₇ = $\chi_{107,1}, \varphi_{102,1}$

	blocks	defect	matrix
	121 122 123 = 121* 124 = 122* 125 126 127 = 125* 128 = 126*	0 0 0 0 	$720_1 = \chi_{108,0}, \varphi_{103,0}$ $720_2 = \chi_{108,1}, \varphi_{103,1}$ $945_1 = \chi_{111,0}, \varphi_{104,0}$ $945_2 = \chi_{111,1}, \varphi_{104,1}$
$6_2.G :$	129 130 131 = 129* 132 = 130* 133 134 = 133* 135 136 = 135* 137 138 139 = 137* 140 = 138* 141 142 143 = 141* 144 = 142* 145 146 147 = 145* 148 = 146* 149 150 151 = 149* 152 = 150*	0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0	$90_5 = \chi_{112,0}, \varphi_{105,0}$ $90_6 = \chi_{112,1}, \varphi_{105,1}$ 4×2 $540_3 = \chi_{117+}, \varphi_{110+}$ $540_5 = \chi_{120,0}, \varphi_{112,0}$ $540_6 = \chi_{120,1}, \varphi_{112,1}$ $630_{10} = \chi_{121,0}, \varphi_{113,0}$ $630_{11} = \chi_{121,1}, \varphi_{113,1}$ $720_5 = \chi_{122,0}, \varphi_{114,0}$ $720_6 = \chi_{122,1}, \varphi_{114,1}$ $1260_1 = \chi_{123,0}, \varphi_{115,0}$ $1260_2 = \chi_{123,1}, \varphi_{115,1}$
$12_2.G :$	153 154 = 153 * 5 155 156 = 155 * 5 157 = 155 * 7 158 = 155 * 11 159 160 = 159 * 5	1 0 0	5×4 $720_9 = \chi_{126+}, \varphi_{119+}$ $1080_2 = \chi_{130+}, \varphi_{122+}$

	blocks	defect	matrix
	161 162 = 161 * 5	0	2520 ₁ = $\chi_{132+}, \varphi_{123+}$

Block 1:	$\varphi_{1,0}$	$\varphi_{2,0}$	$\varphi_{7,0}$	$\varphi_{19,0}$	
$1_1 = \chi_{1,0}$	1	.	.	.	$\varphi_{1,0} = 1_1$
$21_1 = \chi_{2,0}$	.	1	.	.	$\varphi_{2,0} = 21_1$
$189_1 = \chi_{7,0}$	1	.	1	.	$\varphi_{7,0} = 188_1$
$729_1 = \chi_{19,0}$	.	1	.	1	$\varphi_{19,0} = 708_1$
$896_1 = \chi_{20,0}$	.	.	1	1	

Block 2:	$\varphi_{1,1}$	$\varphi_{2,1}$	$\varphi_{7,1}$	$\varphi_{19,1}$	
$1_2 = \chi_{1,1}$	1	.	.	.	$\varphi_{1,1} = 1_2$
$21_2 = \chi_{2,1}$	.	1	.	.	$\varphi_{2,1} = 21_2$
$189_2 = \chi_{7,1}$	1	.	1	.	$\varphi_{7,1} = 188_2$
$729_2 = \chi_{19,1}$	.	1	.	1	$\varphi_{19,1} = 708_2$
$896_2 = \chi_{20,1}$	.	.	1	1	

Block 20:	φ_{21+}	φ_{31+}	
$112_1 = \chi_{22+}$	1	.	$\varphi_{21+} = 112_1$
$1008_1 = \chi_{32+}$	1	1	$\varphi_{31+} = 896_1$
$896_3 = \chi_{39,0}$	.	1	
$896_4 = \chi_{39,1}$	.	1	

Block 38:	φ_{41+}	φ_{43+}	φ_{42+}	φ_{44+}	
$448_1 = \chi_{43+}$	1	.	.	.	$\varphi_{41+} = 448_1$
$448_2 = \chi_{45+}$	.	1	.	.	$\varphi_{43+} = 448_2$
$448_3 = \chi_{44+}$	.	.	1	.	$\varphi_{42+} = 448_3$
$448_4 = \chi_{46+}$	.	.	.	1	$\varphi_{44+} = 448_4$
$1792_1 = \chi_{55+}$	1	1	1	1	

Blocks 47, 49:	$\varphi_{93,0}$	$\varphi_{96,0}$	$\varphi_{97,0}$	$\varphi_{101,0}$
$36_1 = \chi_{99,0}$	1	.	.	.
$126_1 = \chi_{102,0}$	.	1	.	.
$189_3 = \chi_{103,0}$	1	.	1	.
$729_3 = \chi_{109,0}$	.	1	.	1
$756_1 = \chi_{110,0}$	.	.	1	1

$$\begin{aligned} \varphi_{93,0} &= 36_1 \\ \varphi_{96,0} &= 126_1 \\ \varphi_{97,0} &= 153_1 \\ \varphi_{101,0} &= 603_1 \end{aligned}$$

Blocks 48, 50:	$\varphi_{93,1}$	$\varphi_{96,1}$	$\varphi_{97,1}$	$\varphi_{101,1}$
$36_2 = \chi_{99,1}$	1	.	.	.
$126_2 = \chi_{102,1}$	.	1	.	.
$189_4 = \chi_{103,1}$	1	.	1	.
$729_4 = \chi_{109,1}$	.	1	.	1
$756_2 = \chi_{110,1}$	.	.	1	1

$$\begin{aligned} \varphi_{93,1} &= 36_2 \\ \varphi_{96,1} &= 126_2 \\ \varphi_{97,1} &= 153_2 \\ \varphi_{101,1} &= 603_2 \end{aligned}$$

Blocks 75, 76:	φ_{106+}	φ_{108+}
$252_1 = \chi_{113+}$	1	.
$252_3 = \chi_{115+}$	.	1
$504_1 = \chi_{119,0}$	1	1
$504_2 = \chi_{119,1}$	1	1

$$\begin{aligned} \varphi_{106+} &= 252_1 \\ \varphi_{108+} &= 252_3 \end{aligned}$$

Block 95:	φ_{116+}	φ_{117+}	φ_{118+}	φ_{121+}
$72_1 = \chi_{124+}$	1	.	.	.
$432_1 = \chi_{125+}$	.	1	.	.
$1008_2 = \chi_{128+}$	.	1	1	.
$1008_4 = \chi_{129+}$	1	.	.	1
$1512_1 = \chi_{131+}$	.	.	1	1

$$\begin{aligned} \varphi_{116+} &= 72_1 \\ \varphi_{117+} &= 432_1 \\ \varphi_{118+} &= 576_1 \\ \varphi_{121+} &= 936_1 \end{aligned}$$

Blocks 105, 107:	$\varphi_{93,0}$	$\varphi_{96,0}$	$\varphi_{97,0}$	$\varphi_{101,0}$
$36_1 = \chi_{99,0}$	1	.	.	.
$126_1 = \chi_{102,0}$	.	1	.	.
$189_3 = \chi_{103,0}$	1	.	1	.
$729_3 = \chi_{109,0}$	.	1	.	1
$756_1 = \chi_{110,0}$	.	.	1	1

$$\begin{aligned} \varphi_{93,0} &= 36_1 \\ \varphi_{96,0} &= 126_1 \\ \varphi_{97,0} &= 153_1 \\ \varphi_{101,0} &= 603_1 \end{aligned}$$

Blocks 106, 108:	$\varphi_{93,1}$	$\varphi_{96,1}$	$\varphi_{97,1}$	$\varphi_{101,1}$	
$36_2 = \chi_{99,1}$	1	.	.	.	$\varphi_{93,1} = 36_2$
$126_2 = \chi_{102,1}$	.	1	.	.	$\varphi_{96,1} = 126_2$
$189_4 = \chi_{103,1}$	1	.	1	.	$\varphi_{97,1} = 153_2$
$729_4 = \chi_{109,1}$	.	1	.	1	$\varphi_{101,1} = 603_2$
$756_2 = \chi_{110,1}$	.	.	1	1	

Blocks 133, 134:	φ_{106+}	φ_{108+}	
$252_1 = \chi_{113+}$	1	.	$\varphi_{106+} = 252_1$
$252_3 = \chi_{115+}$	.	1	$\varphi_{108+} = 252_3$
$504_1 = \chi_{119,0}$	1	1	
$504_2 = \chi_{119,1}$	1	1	

Block 153:	φ_{116+}	φ_{117+}	φ_{118+}	φ_{121+}	
$72_1 = \chi_{124+}$	1	.	.	.	$\varphi_{116+} = 72_1$
$432_1 = \chi_{125+}$	.	1	.	.	$\varphi_{117+} = 432_1$
$1008_2 = \chi_{128+}$	.	1	1	.	$\varphi_{118+} = 576_1$
$1008_4 = \chi_{129+}$	1	.	.	1	$\varphi_{121+} = 936_1$
$1512_1 = \chi_{131+}$	.	.	1	1	