

## $U_6(2).2 \pmod{11}$

	blocks	defect	matrix
$G :$	1	1	$11 \times 10$
	2	0	$22_1 = \chi_{2,0}, \varphi_{2,0}$
	3	0	$22_2 = \chi_{2,1}, \varphi_{2,1}$
	4	0	$231_1 = \chi_{3,0}, \varphi_{3,0}$
	5	0	$231_2 = \chi_{3,1}, \varphi_{3,1}$
	6	0	$385_1 = \chi_{5,0}, \varphi_{5,0}$
	7	0	$385_2 = \chi_{5,1}, \varphi_{5,1}$
	8	0	$440_1 = \chi_{6,0}, \varphi_{6,0}$
	9	0	$440_2 = \chi_{6,1}, \varphi_{6,1}$
	10	0	$616_1 = \chi_{8,0}, \varphi_{8,0}$
	11	0	$616_2 = \chi_{8,1}, \varphi_{8,1}$
	12	0	$1540_1 = \chi_{9+}, \varphi_{9+}$
	13	0	$1155_1 = \chi_{11,0}, \varphi_{11,0}$
	14	0	$1155_2 = \chi_{11,1}, \varphi_{11,1}$
	15	0	$2310_1 = \chi_{12+}, \varphi_{12+}$
	16	0	$1386_1 = \chi_{14,0}, \varphi_{14,0}$
	17	0	$1386_2 = \chi_{14,1}, \varphi_{14,1}$
	18	0	$1540_2 = \chi_{15,0}, \varphi_{15,0}$
	19	0	$1540_3 = \chi_{15,1}, \varphi_{15,1}$
	20	0	$6160_1 = \chi_{16+}, \varphi_{16+}$
	21	0	$3520_1 = \chi_{18,0}, \varphi_{18,0}$
	22	0	$3520_2 = \chi_{18,1}, \varphi_{18,1}$
	23	0	$4620_1 = \chi_{19,0}, \varphi_{19,0}$
	24	0	$4620_2 = \chi_{19,1}, \varphi_{19,1}$
	25	0	$4928_1 = \chi_{20,0}, \varphi_{20,0}$
	26	0	$4928_2 = \chi_{20,1}, \varphi_{20,1}$
	27	0	$5544_1 = \chi_{21,0}, \varphi_{21,0}$
	28	0	$5544_2 = \chi_{21,1}, \varphi_{21,1}$
	29	0	$12320_1 = \chi_{22+}, \varphi_{22+}$
	30	0	$6930_1 = \chi_{24,0}, \varphi_{24,0}$
	31	0	$6930_2 = \chi_{24,1}, \varphi_{24,1}$
	32	0	$9240_1 = \chi_{26,0}, \varphi_{26,0}$
	33	0	$9240_2 = \chi_{26,1}, \varphi_{26,1}$
	34	0	$18480_1 = \chi_{27+}, \varphi_{27+}$
	35	0	$20790_1 = \chi_{29+}, \varphi_{29+}$
	36	0	$10395_1 = \chi_{31,0}, \varphi_{31,0}$
	37	0	$10395_2 = \chi_{31,1}, \varphi_{31,1}$
	38	0	$20790_2 = \chi_{32+}, \varphi_{32+}$
	39	0	$11264_1 = \chi_{34,0}, \varphi_{34,0}$
	40	0	$11264_2 = \chi_{34,1}, \varphi_{34,1}$

	blocks	defect	matrix
	41	0	$13860_1 = \chi_{35,0}, \varphi_{35,0}$
	42	0	$13860_2 = \chi_{35,1}, \varphi_{35,1}$
	43	0	$14784_1 = \chi_{36,0}, \varphi_{36,0}$
	44	0	$14784_2 = \chi_{36,1}, \varphi_{36,1}$
	45	0	$18711_1 = \chi_{37,0}, \varphi_{37,0}$
	46	0	$18711_2 = \chi_{37,1}, \varphi_{37,1}$
	47	0	$18711_3 = \chi_{38,0}, \varphi_{38,0}$
	48	0	$18711_4 = \chi_{38,1}, \varphi_{38,1}$
	49	0	$41580_1 = \chi_{39+}, \varphi_{39+}$
	50	0	$24640_1 = \chi_{41,0}, \varphi_{41,0}$
	51	0	$24640_2 = \chi_{41,1}, \varphi_{41,1}$
	52	0	$37422_1 = \chi_{45,0}, \varphi_{43,0}$
	53	0	$37422_2 = \chi_{45,1}, \varphi_{43,1}$
	54	0	$40095_1 = \chi_{46,0}, \varphi_{44,0}$
	55	0	$40095_2 = \chi_{46,1}, \varphi_{44,1}$
$2.G :$	56	1	$11 \times 10$
	57	0	$176_1 = \chi_{48,0}, \varphi_{46,0}$
	58	0	$176_2 = \chi_{48,1}, \varphi_{46,1}$
	59	0	$616_3 = \chi_{49,0}, \varphi_{47,0}$
	60	0	$616_4 = \chi_{49,1}, \varphi_{47,1}$
	61	0	$792_1 = \chi_{50,0}, \varphi_{48,0}$
	62	0	$792_2 = \chi_{50,1}, \varphi_{48,1}$
	63	0	$1232_1 = \chi_{51,0}, \varphi_{49,0}$
	64	0	$1232_2 = \chi_{51,1}, \varphi_{49,1}$
	65	0	$2464_1 = \chi_{52,0}, \varphi_{50,0}$
	66	0	$2464_2 = \chi_{52,1}, \varphi_{50,1}$
	67	0	$3080_1 = \chi_{53,0}, \varphi_{51,0}$
	68	0	$3080_2 = \chi_{53,1}, \varphi_{51,1}$
	69	0	$5544_3 = \chi_{56,0}, \varphi_{53,0}$
	70	0	$5544_4 = \chi_{56,1}, \varphi_{53,1}$
71	0	$6160_2 = \chi_{57,0}, \varphi_{54,0}$	
72	0	$6160_3 = \chi_{57,1}, \varphi_{54,1}$	
73	0	$12320_2 = \chi_{58+}, \varphi_{55+}$	
74	0	$9856_1 = \chi_{61,0}, \varphi_{58,0}$	
75	0	$9856_2 = \chi_{61,1}, \varphi_{58,1}$	
76	0	$11264_3 = \chi_{62,0}, \varphi_{60,0}$	
77	0	$11264_4 = \chi_{62,1}, \varphi_{60,1}$	
78	0	$12320_3 = \chi_{63,0}, \varphi_{61,0}$	
79	0	$12320_4 = \chi_{63,1}, \varphi_{61,1}$	
80	0	$24640_3 = \chi_{64+}, \varphi_{62+}$	

	blocks	defect	matrix
	81	0	$15840_1 = \chi_{67,0}, \varphi_{64,0}$
	82	0	$15840_2 = \chi_{67,1}, \varphi_{64,1}$
	83	0	$18480_2 = \chi_{68,0}, \varphi_{65,1}$
	84	0	$18480_3 = \chi_{68,1}, \varphi_{65,0}$
	85	0	$21384_1 = \chi_{69,0}, \varphi_{66,0}$
	86	0	$21384_2 = \chi_{69,1}, \varphi_{66,1}$
	87	0	$22176_1 = \chi_{70,0}, \varphi_{67,0}$
	88	0	$22176_2 = \chi_{70,1}, \varphi_{67,1}$
	89	0	$24640_4 = \chi_{71,0}, \varphi_{69,0}$
	90	0	$24640_5 = \chi_{71,1}, \varphi_{69,1}$
	91	0	$49280_1 = \chi_{72+}, \varphi_{70+}$
	92	0	$27720_1 = \chi_{74,0}, \varphi_{72,0}$
	93	0	$27720_2 = \chi_{74,1}, \varphi_{72,1}$
	94	0	$44352_1 = \chi_{77,0}, \varphi_{73,0}$
	95	0	$44352_2 = \chi_{77,1}, \varphi_{73,1}$
3.G :	96	1	$7 \times 5$
	97	0	$462_1 = \chi_{80+}, \varphi_{76+}$
	98	0	$924_1 = \chi_{81+}, \varphi_{77+}$
	99	0	$1848_1 = \chi_{82+}, \varphi_{78+}$
	100	0	$2310_2 = \chi_{83+}, \varphi_{79+}$
	101	0	$2772_1 = \chi_{84+}, \varphi_{80+}$
	102	0	$2970_1 = \chi_{85+}, \varphi_{81+}$
	103	0	$2970_2 = \chi_{86+}, \varphi_{82+}$
	$104 = \overline{103}$	0	$2970_3 = \chi_{87+}, \varphi_{83+}$
	105	0	$4620_3 = \chi_{88+}, \varphi_{84+}$
	106	0	$4620_4 = \chi_{89+}, \varphi_{85+}$
	107	0	$5544_5 = \chi_{91+}, \varphi_{87+}$
	108	0	$6930_3 = \chi_{92+}, \varphi_{88+}$
	109	0	$6930_4 = \chi_{93+}, \varphi_{89+}$
	110	0	$6930_5 = \chi_{94+}, \varphi_{90+}$
	$111 = \overline{110}$	0	$6930_6 = \chi_{95+}, \varphi_{91+}$
	112	0	$7392_1 = \chi_{96+}, \varphi_{92+}$
	113	0	$9240_3 = \chi_{97+}, \varphi_{93+}$
	114	0	$9240_4 = \chi_{98+}, \varphi_{94+}$
	115	0	$11088_1 = \chi_{99+}, \varphi_{95+}$
	116	0	$13860_3 = \chi_{101+}, \varphi_{97+}$
	117	0	$18480_4 = \chi_{102+}, \varphi_{98+}$
	118	0	$18480_5 = \chi_{103+}, \varphi_{99+}$
	119	0	$20790_3 = \chi_{104+}, \varphi_{100+}$
	120	0	$22176_3 = \chi_{105+}, \varphi_{101+}$

	blocks	defect	matrix
	121	0	$23760_1 = \chi_{106+}, \varphi_{102+}$
	122	0	$23760_2 = \chi_{107+}, \varphi_{103+}$
	$123 = \overline{122}$	0	$23760_3 = \chi_{108+}, \varphi_{104+}$
	124	0	$29568_1 = \chi_{109+}, \varphi_{105+}$
	125	0	$36960_1 = \chi_{110+}, \varphi_{106+}$
	126	0	$37422_3 = \chi_{111+}, \varphi_{107+}$
	127	0	$37422_4 = \chi_{112+}, \varphi_{108+}$
	128	0	$41580_2 = \chi_{113+}, \varphi_{110+}$
	129	0	$55440_1 = \chi_{117+}, \varphi_{111+}$
	130	0	$59136_1 = \chi_{118+}, \varphi_{112+}$
	131	0	$74844_1 = \chi_{119+}, \varphi_{113+}$
	132	0	$80190_1 = \chi_{120+}, \varphi_{114+}$
6.G :	133	1	$7 \times 5$
	134	0	$2112_1 = \chi_{123+}, \varphi_{117+}$
	135	0	$3696_1 = \chi_{124+}, \varphi_{118+}$
	136	0	$5280_1 = \chi_{125+}, \varphi_{119+}$
	137	0	$7392_2 = \chi_{126+}, \varphi_{120+}$
	138	0	$11088_2 = \chi_{127+}, \varphi_{121+}$
	139	0	$12672_1 = \chi_{128+}, \varphi_{122+}$
	140	0	$14784_3 = \chi_{129+}, \varphi_{124+}$
	141	0	$14784_4 = \chi_{130+}, \varphi_{125+}$
	142	0	$18480_6 = \chi_{132+}, \varphi_{127+}$
	143	0	$18480_7 = \chi_{133+}, \varphi_{128+}$
	144	0	$29568_2 = \chi_{135+}, \varphi_{130+}$
	145	0	$36960_2 = \chi_{138+}, \varphi_{131+}$
	146	0	$36960_3 = \chi_{139+}, \varphi_{132+}$
	147	0	$42240_1 = \chi_{140+}, \varphi_{133+}$
	148	0	$42768_1 = \chi_{141+}, \varphi_{134+}$
	149	0	$44352_3 = \chi_{143+}, \varphi_{135+}$
	150	0	$44352_4 = \chi_{144+}, \varphi_{136+}$
	151	0	$55440_2 = \chi_{145+}, \varphi_{137+}$
	152	0	$73920_1 = \chi_{146+}, \varphi_{138+}$
	153	0	$73920_2 = \chi_{147+}, \varphi_{139+}$
	154	0	$73920_3 = \chi_{148+}, \varphi_{140+}$

<b>Block 1:</b>	$\varphi_{1,0}$	$\varphi_{1,1}$	$\varphi_{4,0}$	$\varphi_{4,1}$	$\varphi_{7,0}$	$\varphi_{7,1}$	$\varphi_{25,0}$	$\varphi_{25,1}$	$\varphi_{42,0}$	$\varphi_{42,1}$
$1_1 = \chi_{1,0}$	1	.	.	.	.	.	.	.	.	.
$1_2 = \chi_{1,1}$	.	1	.	.	.	.	.	.	.	.
$252_1 = \chi_{4,0}$	1	.	1	.	.	.	.	.	.	.
$252_2 = \chi_{4,1}$	.	1	.	1	.	.	.	.	.	.
$560_1 = \chi_{7,0}$	.	.	.	.	1	.	.	.	.	.
$560_2 = \chi_{7,1}$	.	.	.	.	.	1	.	.	.	.
$8064_1 = \chi_{25,0}$	.	.	1	.	.	.	1	.	.	.
$8064_2 = \chi_{25,1}$	.	.	.	1	.	.	.	1	.	.
$51030_1 = \chi_{42+}$	.	.	.	.	1	1	.	.	1	1
$32768_1 = \chi_{44,0}$	.	.	.	.	.	.	1	.	1	.
$32768_2 = \chi_{44,1}$	.	.	.	.	.	.	.	1	.	1

$$\begin{aligned}
\varphi_{1,0} &= 1_1 & \varphi_{7,1} &= 560_2 \\
\varphi_{1,1} &= 1_2 & \varphi_{25,0} &= 7813_1 \\
\varphi_{4,0} &= 251_1 & \varphi_{25,1} &= 7813_2 \\
\varphi_{4,1} &= 251_2 & \varphi_{42,0} &= 24955_1 \\
\varphi_{7,0} &= 560_1 & \varphi_{42,1} &= 24955_2
\end{aligned}$$

<b>Block 56:</b>	$\varphi_{45,0}$	$\varphi_{45,1}$	$\varphi_{52,0}$	$\varphi_{52,1}$	$\varphi_{57,0}$	$\varphi_{57,1}$	$\varphi_{59,0}$	$\varphi_{59,1}$	$\varphi_{68,0}$	$\varphi_{68,1}$
$56_1 = \chi_{47,0}$	1	.	.	.	.	.	.	.	.	.
$56_2 = \chi_{47,1}$	.	1	.	.	.	.	.	.	.	.
$6720_1 = \chi_{54+}$	.	.	1	1	.	.	.	.	.	.
$7776_1 = \chi_{60,0}$	1	.	.	.	1	.	.	.	.	.
$7776_2 = \chi_{60,1}$	.	1	.	.	.	1	.	.	.	.
$13608_1 = \chi_{66,0}$	.	.	.	1	.	.	.	1	.	.
$13608_2 = \chi_{66,1}$	.	.	1	.	.	.	1	.	.	.
$30240_1 = \chi_{75,0}$	.	.	.	.	1	.	.	.	1	.
$30240_2 = \chi_{75,1}$	.	.	.	.	.	1	.	.	.	1
$32768_3 = \chi_{76,0}$	.	.	.	.	.	.	.	1	.	1
$32768_4 = \chi_{76,1}$	.	.	.	.	.	.	1	.	1	.

$$\begin{aligned}
\varphi_{45,0} &= 56_1 & \varphi_{57,1} &= 7720_2 \\
\varphi_{45,1} &= 56_2 & \varphi_{59,0} &= 10248_1 \\
\varphi_{52,0} &= 3360_1 & \varphi_{59,1} &= 10248_2 \\
\varphi_{52,1} &= 3360_2 & \varphi_{68,0} &= 22520_1 \\
\varphi_{57,0} &= 7720_1 & \varphi_{68,1} &= 22520_2
\end{aligned}$$

<b>Block 96:</b>	$\varphi_{74+}$	$\varphi_{75+}$	$\varphi_{86+}$	$\varphi_{96+}$	$\varphi_{109+}$
$42_1 = \chi_{78+}$	1	.	.	.	.
$420_1 = \chi_{79+}$	.	1	.	.	.
$5040_1 = \chi_{90+}$	1	.	1	.	.
$13440_1 = \chi_{100+}$	.	1	.	1	.
$43008_1 = \chi_{114+}$	.	.	1	.	1
$51030_2 = \chi_{115+}$	.	.	.	1	1
$51030_3 = \chi_{116+}$	.	.	.	1	1

$$\begin{aligned} \varphi_{74+} &= 42_1 \\ \varphi_{75+} &= 420_1 \\ \varphi_{86+} &= 4998_1 \\ \varphi_{96+} &= 13020_1 \\ \varphi_{109+} &= 38010_1 \end{aligned}$$

<b>Block 133:</b>	$\varphi_{115+}$	$\varphi_{116+}$	$\varphi_{123+}$	$\varphi_{126+}$	$\varphi_{129+}$
$240_1 = \chi_{121+}$	1	.	.	.	.
$1344_1 = \chi_{122+}$	.	1	.	.	.
$15552_1 = \chi_{131+}$	.	1	1	.	.
$27216_1 = \chi_{134+}$	1	.	.	.	1
$30240_3 = \chi_{136+}$	.	.	1	1	.
$30240_4 = \chi_{137+}$	.	.	1	1	.
$43008_2 = \chi_{142+}$	.	.	.	1	1

$$\begin{aligned} \varphi_{115+} &= 240_1 \\ \varphi_{116+} &= 1344_1 \\ \varphi_{123+} &= 14208_1 \\ \varphi_{126+} &= 16032_1 \\ \varphi_{129+} &= 26976_1 \end{aligned}$$