

## $L_6(2).2 \pmod{31}$

	blocks	defect	matrix
$G :$	1	1	$13 \times 10$
	2	0	$62_1 = \chi_{2,0}, \varphi_{2,0}$
	3	0	$62_2 = \chi_{2,1}, \varphi_{2,1}$
	4	0	$217_1 = \chi_{3,0}, \varphi_{3,0}$
	5	0	$217_2 = \chi_{3,1}, \varphi_{3,1}$
	6	0	$651_1 = \chi_{5,0}, \varphi_{5,0}$
	7	0	$651_2 = \chi_{5,1}, \varphi_{5,1}$
	8	0	$744_1 = \chi_{6,0}, \varphi_{6,0}$
	9	0	$744_2 = \chi_{6,1}, \varphi_{6,1}$
	10	0	$1240_1 = \chi_{7,0}, \varphi_{7,0}$
	11	0	$1240_2 = \chi_{7,1}, \varphi_{7,1}$
	12	0	$2790_1 = \chi_{8+}, \varphi_{8+}$
	13	0	$8370_1 = \chi_{10+}, \varphi_{10+}$
	14	0	$4340_1 = \chi_{12,0}, \varphi_{12,0}$
	15	0	$4340_2 = \chi_{12,1}, \varphi_{12,1}$
	16	0	$4557_1 = \chi_{13,0}, \varphi_{13,0}$
	17	0	$4557_2 = \chi_{13,1}, \varphi_{13,1}$
	18	0	$5952_1 = \chi_{14,0}, \varphi_{15,0}$
	19	0	$5952_2 = \chi_{14,1}, \varphi_{15,1}$
	20	0	$9114_1 = \chi_{16,0}, \varphi_{16,0}$
	21	0	$9114_2 = \chi_{16,1}, \varphi_{16,1}$
	22	0	$9114_3 = \chi_{17,0}, \varphi_{17,0}$
	23	0	$9114_4 = \chi_{17,1}, \varphi_{17,1}$
	24	0	$9765_1 = \chi_{18,0}, \varphi_{18,0}$
	25	0	$9765_2 = \chi_{18,1}, \varphi_{18,1}$
	26	0	$19530_1 = \chi_{19+}, \varphi_{19+}$
	27	0	$19530_2 = \chi_{21+}, \varphi_{21+}$
	28	0	$19530_3 = \chi_{23+}, \varphi_{23+}$
	29	0	$19530_4 = \chi_{25+}, \varphi_{25+}$
	30	0	$9920_1 = \chi_{27,0}, \varphi_{27,0}$

	blocks	defect	matrix
	31	0	$9920_2 = \chi_{27,1}, \varphi_{27,1}$
	32	0	$22320_1 = \chi_{28+}, \varphi_{28+}$
	33	0	$12555_1 = \chi_{30,0}, \varphi_{30,0}$
	34	0	$12555_2 = \chi_{30,1}, \varphi_{30,1}$
	35	0	$13020_1 = \chi_{31,0}, \varphi_{32,0}$
	36	0	$13020_2 = \chi_{31,1}, \varphi_{32,1}$
	37	0	$13671_1 = \chi_{32,0}, \varphi_{33,0}$
	38	0	$13671_2 = \chi_{32,1}, \varphi_{33,1}$
	39	0	$13671_3 = \chi_{33,0}, \varphi_{34,0}$
	40	0	$13671_4 = \chi_{33,1}, \varphi_{34,1}$
	41	0	$27342_1 = \chi_{34+}, \varphi_{35+}$
	42	0	$27342_2 = \chi_{36+}, \varphi_{37+}$
	43	0	$13888_1 = \chi_{38,0}, \varphi_{39,0}$
	44	0	$13888_2 = \chi_{38,1}, \varphi_{39,1}$
	45	0	$18228_1 = \chi_{39,0}, \varphi_{40,0}$
	46	0	$18228_2 = \chi_{39,1}, \varphi_{40,1}$
	47	0	$50220_1 = \chi_{47+}, \varphi_{42+}$
	48	0	$27342_3 = \chi_{49,0}, \varphi_{44,0}$
	49	0	$27342_4 = \chi_{49,1}, \varphi_{44,1}$
	50	0	$54684_1 = \chi_{50+}, \varphi_{45+}$
	51	0	$58590_1 = \chi_{52+}, \varphi_{47+}$
	52	0	$31744_1 = \chi_{54,0}, \varphi_{49,0}$
	53	0	$31744_2 = \chi_{54,1}, \varphi_{49,1}$
	54	0	$66960_1 = \chi_{56+}, \varphi_{50+}$
	55	0	$36456_1 = \chi_{58,0}, \varphi_{52,0}$
	56	0	$36456_2 = \chi_{58,1}, \varphi_{52,1}$
	57	0	$36456_3 = \chi_{59,0}, \varphi_{53,0}$
	58	0	$36456_4 = \chi_{59,1}, \varphi_{53,1}$
	59	0	$41664_1 = \chi_{60,0}, \varphi_{54,0}$
	60	0	$41664_2 = \chi_{60,1}, \varphi_{54,1}$

<b>Block 1:</b>	$\varphi_{1,0}$	$\varphi_{1,1}$	$\varphi_{4,0}$	$\varphi_{4,1}$	$\varphi_{14,0}$	$\varphi_{14,1}$	$\varphi_{31,0}$	$\varphi_{31,1}$	$\varphi_{41,0}$	$\varphi_{41,1}$
$1_1 = \chi_{1,0}$	1	.	.	.	.	.	.	.	.	.
$1_2 = \chi_{1,1}$	.	1	.	.	.	.	.	.	.	.
$588_1 = \chi_{4,0}$	1	.	1	.	.	.	.	.	.	.
$588_2 = \chi_{4,1}$	.	1	.	1	.	.	.	.	.	.
$6480_1 = \chi_{15,0}$	.	.	1	.	.	1	.	.	.	.
$6480_2 = \chi_{15,1}$	.	.	.	1	1	.	.	.	.	.
$18816_1 = \chi_{40,0}$	.	.	.	.	1	.	1	.	.	.
$18816_2 = \chi_{40,1}$	.	.	.	.	.	1	.	1	.	.
$39690_1 = \chi_{41+}$	.	.	.	.	.	.	.	.	1	1
$39690_2 = \chi_{43+}$	.	.	.	.	.	.	.	.	1	1
$39690_3 = \chi_{45+}$	.	.	.	.	.	.	.	.	1	1
$32768_1 = \chi_{55,0}$	.	.	.	.	.	.	1	.	1	.
$32768_2 = \chi_{55,1}$	.	.	.	.	.	.	.	1	.	1

$$\begin{array}{ll}
\varphi_{1,0} = 1_1 & \varphi_{14,1} = 5893_2 \\
\varphi_{1,1} = 1_2 & \varphi_{31,0} = 12923_1 \\
\varphi_{4,0} = 587_1 & \varphi_{31,1} = 12923_2 \\
\varphi_{4,1} = 587_2 & \varphi_{41,0} = 19845_1 \\
\varphi_{14,0} = 5893_1 & \varphi_{41,1} = 19845_2
\end{array}$$