

$Fi_{23} \pmod{11}$

|       | blocks               | defect | matrix                                 |
|-------|----------------------|--------|----------------------------------------|
| $G :$ | 1                    | 1      | $11 \times 10$                         |
|       | 2                    | 1      | $7 \times 5$                           |
|       | 3                    | 1      | $11 \times 10$                         |
|       | 4                    | 0      | $25806_1 = \chi_5, \varphi_5$          |
|       | 5                    | 0      | $30888_1 = \chi_6, \varphi_6$          |
|       | 6                    | 0      | $111826_1 = \chi_9, \varphi_9$         |
|       | 7                    | 0      | $279565_1 = \chi_{11}, \varphi_{11}$   |
|       | 8                    | 0      | $752675_1 = \chi_{12}, \varphi_{12}$   |
|       | 9                    | 0      | $789360_1 = \chi_{13}, \varphi_{13}$   |
|       | 10                   | 0      | $812889_1 = \chi_{14}, \varphi_{14}$   |
|       | 11                   | 0      | $850850_1 = \chi_{17}, \varphi_{17}$   |
|       | $12 = \overline{11}$ | 0      | $850850_2 = \chi_{18}, \varphi_{18}$   |
|       | 13                   | 0      | $1677390_1 = \chi_{19}, \varphi_{19}$  |
|       | 14                   | 0      | $2236520_1 = \chi_{21}, \varphi_{21}$  |
|       | 15                   | 0      | $2322540_1 = \chi_{22}, \varphi_{22}$  |
|       | 16                   | 0      | $3913910_1 = \chi_{23}, \varphi_{23}$  |
|       | 17                   | 0      | $5533110_1 = \chi_{24}, \varphi_{24}$  |
|       | 18                   | 0      | $6709560_1 = \chi_{25}, \varphi_{25}$  |
|       | 19                   | 0      | $7468032_1 = \chi_{26}, \varphi_{26}$  |
|       | 20                   | 0      | $10567557_1 = \chi_{30}, \varphi_{29}$ |
|       | 21                   | 0      | $12077208_1 = \chi_{32}, \varphi_{31}$ |
|       | 22                   | 0      | $15096510_1 = \chi_{33}, \varphi_{32}$ |
|       | 23                   | 0      | $17892160_1 = \chi_{34}, \varphi_{33}$ |
|       | 24                   | 0      | $18812574_1 = \chi_{35}, \varphi_{34}$ |
|       | 25                   | 0      | $20322225_1 = \chi_{36}, \varphi_{35}$ |
|       | 26                   | 0      | $21135114_1 = \chi_{37}, \varphi_{36}$ |
|       | 27                   | 0      | $22644765_1 = \chi_{39}, \varphi_{38}$ |
|       | 28                   | 0      | $26838240_1 = \chi_{40}, \varphi_{39}$ |
|       | 29                   | 0      | $29354325_1 = \chi_{42}, \varphi_{41}$ |
|       | 30                   | 0      | $35225190_1 = \chi_{43}, \varphi_{42}$ |
|       | 31                   | 0      | $37573536_1 = \chi_{44}, \varphi_{43}$ |
|       | 32                   | 0      | $40840800_1 = \chi_{45}, \varphi_{44}$ |
|       | 33                   | 0      | $42270228_1 = \chi_{46}, \varphi_{45}$ |
|       | 34                   | 0      | $48308832_1 = \chi_{48}, \varphi_{47}$ |
|       | 35                   | 0      | $55740960_1 = \chi_{49}, \varphi_{48}$ |
|       | 36                   | 0      | $56360304_1 = \chi_{50}, \varphi_{49}$ |
|       | 37                   | 0      | $56360304_2 = \chi_{51}, \varphi_{50}$ |
|       | 38                   | 0      | $57254912_1 = \chi_{52}, \varphi_{52}$ |
|       | 39                   | 0      | $58708650_1 = \chi_{53}, \varphi_{53}$ |
|       | 40                   | 0      | $58708650_2 = \chi_{54}, \varphi_{54}$ |

|  | blocks | defect | matrix                                  |
|--|--------|--------|-----------------------------------------|
|  | 41     | 0      | $73531392_1 = \chi_{56}, \varphi_{55}$  |
|  | 42     | 0      | $73531392_2 = \chi_{57}, \varphi_{56}$  |
|  | 43     | 0      | $78278200_1 = \chi_{58}, \varphi_{58}$  |
|  | 44     | 0      | $93933840_1 = \chi_{59}, \varphi_{60}$  |
|  | 45     | 0      | $153014400_1 = \chi_{62}, \varphi_{63}$ |
|  | 46     | 0      | $153014400_2 = \chi_{63}, \varphi_{64}$ |
|  | 47     | 0      | $176125950_1 = \chi_{66}, \varphi_{66}$ |
|  | 48     | 0      | $176125950_2 = \chi_{67}, \varphi_{67}$ |
|  | 49     | 0      | $203802885_1 = \chi_{68}, \varphi_{69}$ |
|  | 50     | 0      | $211351140_1 = \chi_{70}, \varphi_{70}$ |
|  | 51     | 0      | $216770400_1 = \chi_{72}, \varphi_{71}$ |
|  | 52     | 0      | $244563462_1 = \chi_{73}, \varphi_{73}$ |
|  | 53     | 0      | $263376036_1 = \chi_{74}, \varphi_{75}$ |
|  | 54     | 0      | $264188925_1 = \chi_{75}, \varphi_{76}$ |
|  | 55     | 0      | $286274560_1 = \chi_{78}, \varphi_{77}$ |
|  | 56     | 0      | $287721720_1 = \chi_{79}, \varphi_{78}$ |
|  | 57     | 0      | $289027200_1 = \chi_{80}, \varphi_{79}$ |
|  | 58     | 0      | $289027200_2 = \chi_{81}, \varphi_{80}$ |
|  | 59     | 0      | $313112800_1 = \chi_{83}, \varphi_{81}$ |
|  | 60     | 0      | $313112800_2 = \chi_{84}, \varphi_{82}$ |
|  | 61     | 0      | $313112800_3 = \chi_{85}, \varphi_{83}$ |
|  | 62     | 0      | $322058880_1 = \chi_{86}, \varphi_{84}$ |
|  | 63     | 0      | $336061440_1 = \chi_{87}, \varphi_{85}$ |
|  | 64     | 0      | $343529472_1 = \chi_{89}, \varphi_{86}$ |
|  | 65     | 0      | $352251900_1 = \chi_{90}, \varphi_{87}$ |
|  | 66     | 0      | $362316240_1 = \chi_{91}, \varphi_{88}$ |
|  | 67     | 0      | $496897335_1 = \chi_{93}, \varphi_{89}$ |
|  | 68     | 0      | $504627200_1 = \chi_{94}, \varphi_{90}$ |
|  | 69     | 0      | $504627200_2 = \chi_{95}, \varphi_{91}$ |
|  | 70     | 0      | $526752072_1 = \chi_{96}, \varphi_{92}$ |
|  | 71     | 0      | $528377850_1 = \chi_{97}, \varphi_{93}$ |
|  | 72     | 0      | $559458900_1 = \chi_{98}, \varphi_{94}$ |

[illegible]

| Block 2:                  | $\varphi_3$ | $\varphi_{28}$ | $\varphi_{37}$ | $\varphi_{51}$ | $\varphi_{57}$ |                             |
|---------------------------|-------------|----------------|----------------|----------------|----------------|-----------------------------|
| $3588_1 = \chi_3$         | 1           | .              | .              | .              | .              | $\varphi_3 = 3588_1$        |
| $9108736_1 = \chi_{28}$   | .           | 1              | .              | .              | .              | $\varphi_{28} = 9108736_1$  |
| $9108736_2 = \chi_{29}$   | .           | 1              | .              | .              | .              | $\varphi_{37} = 21345012_1$ |
| $21348600_1 = \chi_{38}$  | 1           | .              | 1              | .              | .              | $\varphi_{51} = 56766944_1$ |
| $65875680_1 = \chi_{55}$  | .           | 1              | .              | 1              | .              | $\varphi_{57} = 76631308_1$ |
| $97976320_1 = \chi_{60}$  | .           | .              | 1              | .              | 1              |                             |
| $133398252_1 = \chi_{61}$ | .           | .              | .              | 1              | 1              |                             |

[illegible]

|                |   |             |                |   |               |
|----------------|---|-------------|----------------|---|---------------|
| $\varphi_4$    | = | $5083_1$    | $\varphi_{30}$ | = | $10669217_1$  |
| $\varphi_7$    | = | $60996_1$   | $\varphi_{46}$ | = | $46143474_1$  |
| $\varphi_{15}$ | = | $837200_1$  | $\varphi_{61}$ | = | $118741870_1$ |
| $\varphi_{16}$ | = | $837200_2$  | $\varphi_{72}$ | = | $222835730_1$ |
| $\varphi_{20}$ | = | $1890876_1$ | $\varphi_{74}$ | = | $253866847_1$ |