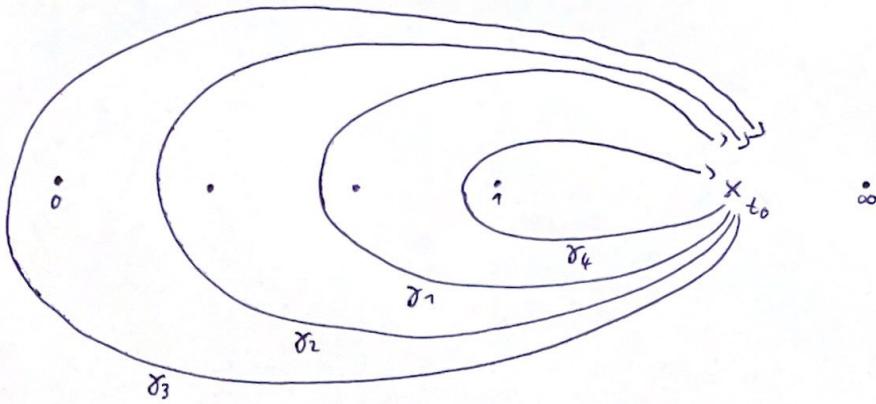


$(k, \ell) = (1, 1)$:



Action of M_0 :

$$M_0 I_2(\gamma, v) = I_2(M_0 \gamma, v \begin{pmatrix} 1 & 0 & 0 \\ 0 & 1 & 0 \\ 0 & 0 & 1 \end{pmatrix})$$

$$\gamma_1 \mapsto \gamma_1$$

$$\gamma_2 \mapsto \gamma_1 \circ \gamma_3^{-1} \circ \gamma_2 \circ \gamma_1^{-1} \circ \gamma_3$$

$$\gamma_3 \mapsto \gamma_3$$

$$\gamma_4 \mapsto \gamma_1^{-1} \circ \gamma_4 \circ \gamma_1$$

Action of M_1 :

$$M_1 I_2(\gamma, v) = I_2(M_1 \gamma, v)$$

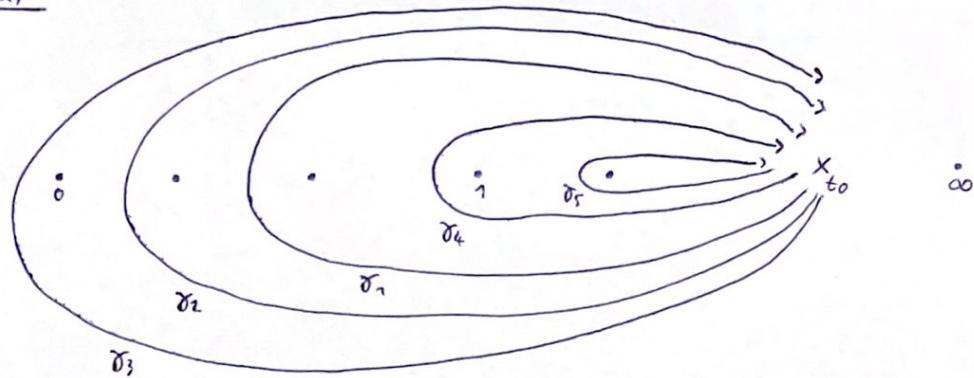
$$\gamma_1 \mapsto \gamma_4 \circ \gamma_1^{-1} \circ \gamma_2$$

$$\gamma_2 \mapsto \gamma_2$$

$$\gamma_3 \mapsto \gamma_3$$

$$\gamma_4 \mapsto \gamma_4$$

$(k, \ell) = (1, 2)$:



Action of M_0 : $M_0 I_Z(\gamma, v) = I_Z(M_0 \gamma, v \begin{pmatrix} 1 & 0 & 0 \\ 0 & 1 & 0 \\ 0 & 0 & 1 \end{pmatrix})$

$$\gamma_1 \mapsto \gamma_1$$

$$\gamma_2 \mapsto \gamma_1 \circ \gamma_3^{-1} \circ \gamma_2 \circ \gamma_1^{-1} \circ \gamma_3$$

$$\gamma_3 \mapsto \gamma_3$$

$$\gamma_4 \mapsto \gamma_5^{-1} \circ \gamma_1$$

$$\gamma_5 \mapsto \gamma_4^{-1} \circ \gamma_1$$

Action of M_1 : $M_1 I_Z(\gamma, v) = I_Z(M_1 \gamma, v)$

$$\gamma_1 \mapsto \gamma_4 \circ \gamma_1^{-1} \circ \gamma_2$$

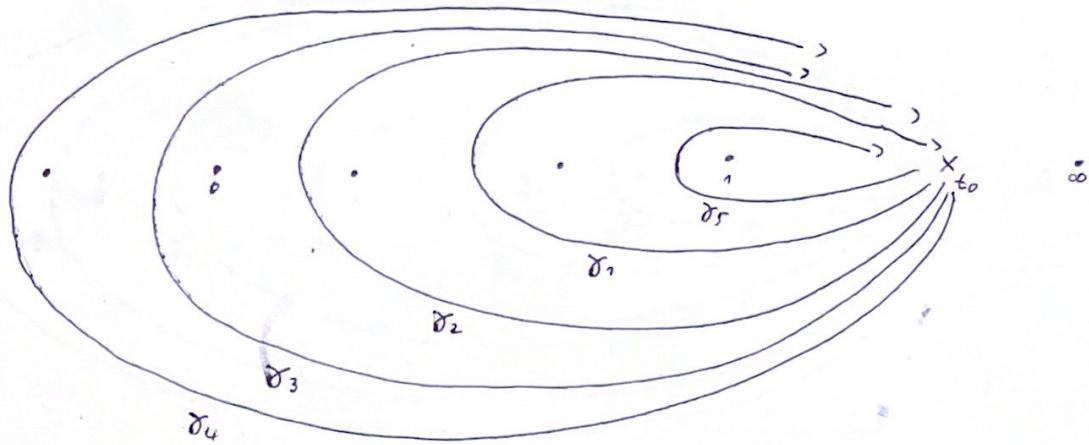
$$\gamma_2 \mapsto \gamma_2$$

$$\gamma_3 \mapsto \gamma_3$$

$$\gamma_4 \mapsto \gamma_4$$

$$\gamma_5 \mapsto \gamma_5$$

$(k, \ell) = (2, 1)$:



Action of M_0 :

$$M_0 I_2(\gamma, v) = I_2(M_0 \gamma, v \begin{pmatrix} 1 & 0 & 0 \\ 1 & 1 & 0 \\ 1 & 1 & 1 \end{pmatrix})$$

$$\gamma_1 \mapsto \gamma_1$$

$$\gamma_2 \mapsto \gamma_1 \circ \gamma_3^{-1} \circ \gamma_4$$

$$\gamma_3 \mapsto \gamma_1 \circ \gamma_2^{-1} \circ \gamma_4$$

$$\gamma_4 \mapsto \gamma_4$$

$$\gamma_5 \mapsto \gamma_1^{-1} \circ \gamma_2 \circ \gamma_3$$

Action of M_1 :

$$M_1 I_2(\gamma, v) = I_2(M_1 \gamma, v)$$

$$\gamma_1 \mapsto \gamma_5 \circ \gamma_1^{-1} \circ \gamma_2$$

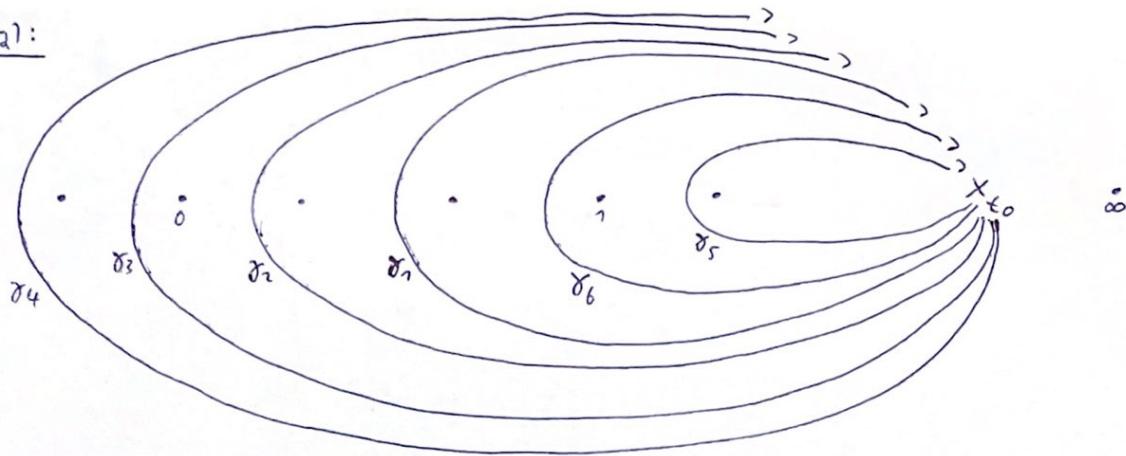
$$\gamma_2 \mapsto \gamma_2$$

$$\gamma_3 \mapsto \gamma_3$$

$$\gamma_4 \mapsto \gamma_4$$

$$\gamma_5 \mapsto \gamma_5$$

$(k, \ell) = (2, 2)$:



Action of M_0 :

$$M_0 I_Z(\gamma, v) = I_Z(M_0 \gamma, v \begin{pmatrix} 1 & 0 & 0 \\ 1 & 1 & 0 \\ 1/2 & 1 & 1 \end{pmatrix})$$

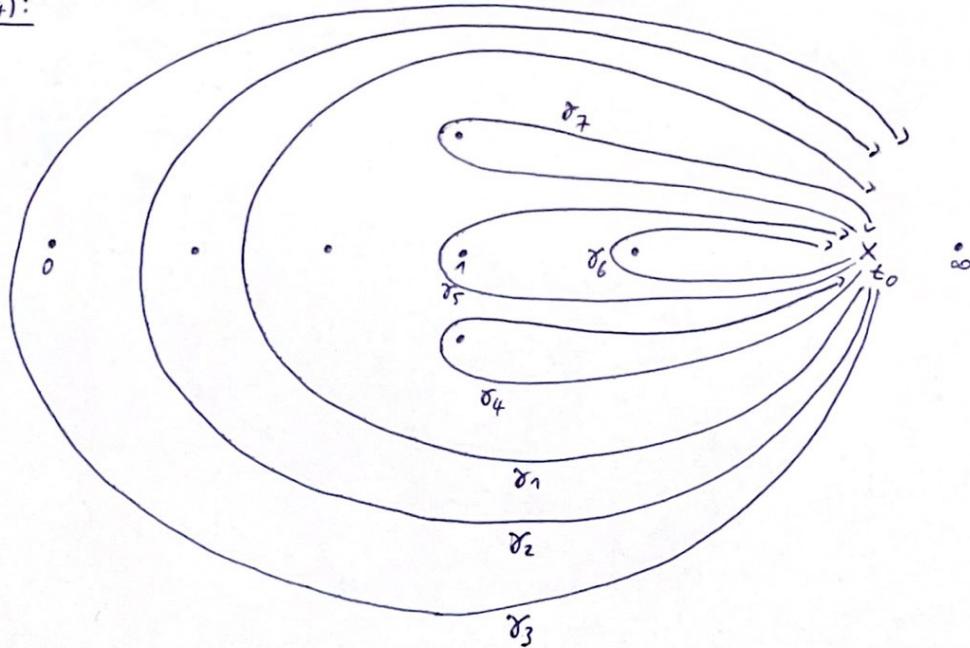
$$\begin{aligned}\gamma_1 &\mapsto \gamma_1 \\ \gamma_2 &\mapsto \gamma_1 \circ \gamma_3^{-1} \circ \gamma_4 \\ \gamma_3 &\mapsto \gamma_1 \circ \gamma_2^{-1} \circ \gamma_4 \\ \gamma_4 &\mapsto \gamma_4 \\ \gamma_5 &\mapsto \gamma_6^{-1} \circ \gamma_1 \\ \gamma_6 &\mapsto \gamma_5^{-1} \circ \gamma_1\end{aligned}$$

Action of M_1 :

$$M_1 I_Z(\gamma, v) = I_Z(M_1 \gamma, v)$$

$$\begin{aligned}\gamma_1 &\mapsto \gamma_6 \circ \gamma_1^{-1} \circ \gamma_2 \\ \gamma_2 &\mapsto \gamma_2 \\ \gamma_3 &\mapsto \gamma_3 \\ \gamma_4 &\mapsto \gamma_4 \\ \gamma_5 &\mapsto \gamma_5 \\ \gamma_6 &\mapsto \gamma_6\end{aligned}$$

$(K, \ell) = (1, 4)$:



Action of M_0 :

$$M_0 I_Z(\gamma_i, v) = I_Z(M_0 \gamma_i, v \begin{pmatrix} 1 & 0 & 0 \\ 1 & 1 & 0 \\ 1 & 1 & 1 \end{pmatrix})$$

$$\gamma_1 \mapsto \gamma_1$$

$$\gamma_2 \mapsto \gamma_1 \circ \gamma_3^{-1} \circ \gamma_2 \circ \gamma_1^{-1} \circ \gamma_3$$

$$\gamma_3 \mapsto \gamma_3$$

$$\gamma_4 \mapsto \gamma_4$$

$$\gamma_5 \mapsto \gamma_6^{-1} \circ \gamma_5 \circ \gamma_7$$

$$\gamma_6 \mapsto \gamma_7$$

$$\gamma_7 \mapsto \gamma_7^{-1} \circ \gamma_5^{-1} \circ \gamma_4^{-1} \circ \gamma_1$$

Action of M_1 :

$$M_1 I_Z(\gamma_i, v) = I_Z(M_1 \gamma_i, v)$$

$$\gamma_1 \mapsto \gamma_4 \circ \gamma_5 \circ \gamma_7 \circ \gamma_1^{-1} \circ \gamma_2$$

$$\gamma_2 \mapsto \gamma_2$$

$$\gamma_3 \mapsto \gamma_3$$

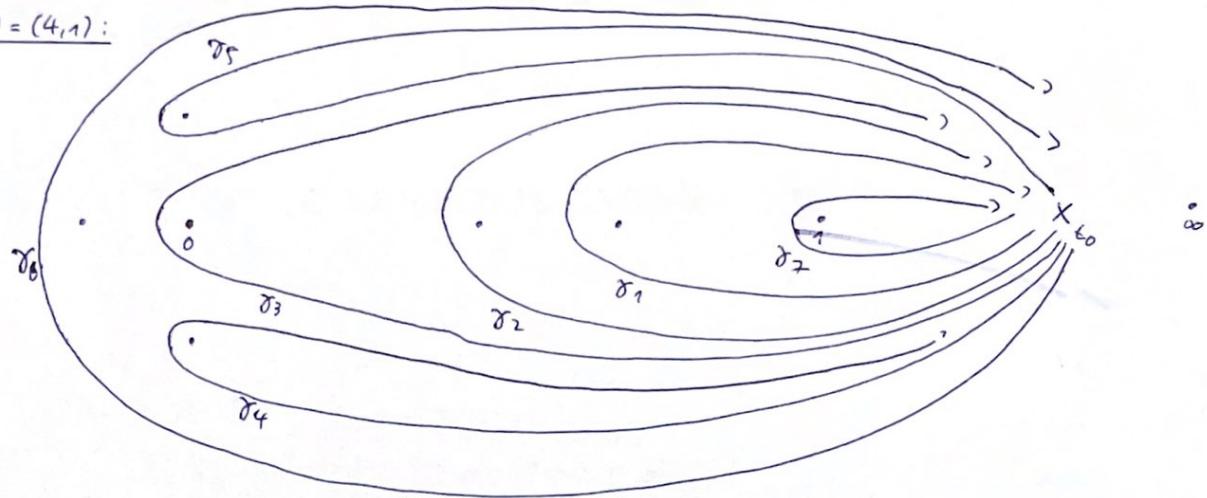
$$\gamma_4 \mapsto \gamma_4$$

$$\gamma_5 \mapsto \gamma_5$$

$$\gamma_6 \mapsto \gamma_6$$

$$\gamma_7 \mapsto \gamma_7$$

$(k, l) = (4, 1)$:



Action of M_0 :

$$M_0 I_2(\gamma, v) = I_2(M_0 \gamma, v \begin{pmatrix} 1 & 0 & 0 \\ 1 & 1 & 0 \\ 1 & 1 & 1 \end{pmatrix})$$

$$\begin{aligned}\gamma_1 &\mapsto \gamma_1 \\ \gamma_2 &\mapsto \gamma_1 \circ \gamma_5 \\ \gamma_3 &\mapsto \gamma_1 \circ \gamma_2^{-1} \circ \gamma_3 \circ \gamma_5 \\ \gamma_4 &\mapsto \gamma_2 \circ \gamma_1^{-1} \\ \gamma_5 &\mapsto \gamma_5^{-1} \circ \gamma_3^{-1} \circ \gamma_4^{-1} \circ \gamma_6 \\ \gamma_6 &\mapsto \gamma_6 \\ \gamma_7 &\mapsto \gamma_1^{-1} \circ \gamma_2 \circ \gamma_1\end{aligned}$$

Action of M_1 :

$$M_1 I_2(\gamma, v) = I_2(M_1 \gamma, v)$$

$$\begin{aligned}\gamma_1 &\mapsto \gamma_7 \circ \gamma_1^{-1} \circ \gamma_2 \\ \gamma_2 &\mapsto \gamma_2 \\ \gamma_3 &\mapsto \gamma_3 \\ \gamma_4 &\mapsto \gamma_4 \\ \gamma_5 &\mapsto \gamma_5 \\ \gamma_6 &\mapsto \gamma_6 \\ \gamma_7 &\mapsto \gamma_7\end{aligned}$$