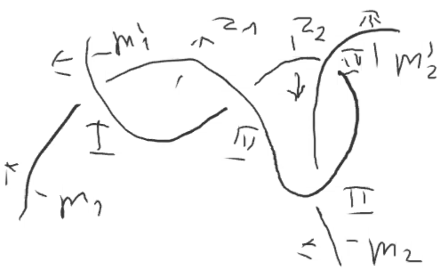
$$f(\mathrm{I}) = (1 - e(m_2'))f(m_1) + f(m_2) - e(m_1)f(m_2')$$

$$f(\mathrm{II}) = f(m_1) - e(m_2')f(m_1') + (1 - e(m_1'))f(m_2')$$

$$\begin{array}{c} 0\times 0 \\ \left(\begin{array}{cc|cc} 1-t_2 & 1 & 0 & -t_1 \\ 1 & 0 & -t_2 & 1-t_1 \end{array}\right) \\ A \quad B \quad C \end{array}$$

$$A^{-1} = \begin{pmatrix} 0 & 1 \\ 1 & t_2-1 \end{pmatrix}$$

$$A^{-1}(-C) = \begin{pmatrix} -t_2 & 1-t_1 \\ t_2^2 - t_2 & -t_1 + (t_1-1)(t_2-1) \end{pmatrix}$$



$$f(\mathrm{I}) = e(m_1')f(m_1) - f(z_1) + (1-e(m_1))f(m_1')$$

$$f(\mathrm{II}) = f(m_2) + (1-e(m_2'))f(z_1) - e(z_1)f(m_2')$$

$$f(\mathrm{III}) = (1-e(z_2))f(z_1) + e(z_1)f(z_2) - f(m_1')$$

$$f(\mathrm{IV}) = f(z_1) - e(m_2')f(z_2) + (1-e(z_2))f(m_2')$$

$$\left(\begin{array}{cc|cc|cc} t_1 & 0 & -1 & 0 & 1-t_1 & 0 \\ 0 & 1 & 1-t_2 & 0 & 0 & -t_1 \\ 0 & 0 & 1-t_2 & t_1 & -1 & 0 \\ 0 & 0 & 1 & -t_2 & 0 & 1-t_2 \end{array}\right)$$

$$\quad A \qquad\qquad B \qquad\qquad C$$

$$(A,B)^{-1} = \begin{pmatrix} \frac{1}{t_1} & 0 & -\frac{t_2}{t_1(q)} & -\frac{1}{q} \\ 0 & 1 & -\frac{t_2(t_2-1)}{q} & -\frac{t_1(t_2-1)}{q} \\ 0 & 0 & -\frac{t_2}{q} & -\frac{t_1}{q} \\ 0 & 0 & -\frac{1}{q} & 1-t_1/q \end{pmatrix}$$

$$q = t_2(t_1-1) - t_1$$

$$r(L_2) = (A, B)^{-1}(F\,C) = \frac{1}{9}\begin{pmatrix} 1-2t_2-t_1+t_1t_2 & t_1-1 \\ (t_2-1)t_2 & -t_1 \end{pmatrix}$$

$$r(L_1) = \begin{pmatrix} t_2 & 1-t_1 \\ (1-t_2)t_2 & 1-t_2+t_1t_2 \end{pmatrix}$$