

Simplex cycling example from book

$$T_1 = \left(\begin{array}{c|cccccccc} & x_1 & x_2 & x_3 & x_4 & x_5 & x_6 & x_7 \\ \hline 3 & -\frac{3}{4} & 20 & -\frac{1}{2} & 6 & 0 & 0 & 0 \\ 0 & \mathbf{1/4} & -8 & -1 & 9 & 1 & 0 & 0 \\ 0 & \frac{1}{2} & -12 & -\frac{1}{2} & 3 & 0 & 1 & 0 \\ 1 & 0 & 0 & 1 & 0 & 0 & 0 & 1 \end{array} \right)$$

$$T_2 = \left(\begin{array}{c|cccccccc} & x_1 & x_2 & x_3 & x_4 & x_5 & x_6 & x_7 \\ \hline 3 & 0 & -4 & -\frac{7}{2} & 33 & 3 & 0 & 0 \\ 0 & 1 & -32 & -4 & 36 & 4 & 0 & 0 \\ 0 & 0 & \mathbf{4} & \frac{3}{2} & -15 & -2 & 1 & 0 \\ 1 & 0 & 0 & 1 & 0 & 0 & 0 & 1 \end{array} \right)$$

$$T_3 = \left(\begin{array}{c|cccccccc} & x_1 & x_2 & x_3 & x_4 & x_5 & x_6 & x_7 \\ \hline 3 & 0 & 0 & -2 & 18 & 1 & 1 & 0 \\ 0 & 1 & 0 & \mathbf{8} & -84 & -12 & 8 & 0 \\ 0 & 0 & 1 & \frac{3}{8} & -\frac{15}{4} & -\frac{1}{2} & \frac{1}{4} & 0 \\ 1 & 0 & 0 & 1 & 0 & 0 & 0 & 1 \end{array} \right)$$

$$T_4 = \left(\begin{array}{c|cccccccc} & x_1 & x_2 & x_3 & x_4 & x_5 & x_6 & x_7 \\ \hline 3 & \frac{1}{4} & 0 & 0 & -3 & -2 & 3 & 0 \\ 0 & \frac{1}{8} & 0 & 1 & -\frac{21}{2} & -\frac{3}{2} & 1 & 0 \\ 0 & -\frac{3}{64} & 1 & 0 & \frac{\mathbf{3}}{16} & \frac{1}{16} & -\frac{1}{8} & 0 \\ 1 & -\frac{1}{8} & 0 & 0 & 21/2 & \frac{3}{2} & -1 & 1 \end{array} \right)$$

$$T_5 = \left(\begin{array}{c|cccccccc} & x_1 & x_2 & x_3 & x_4 & x_5 & x_6 & x_7 \\ \hline 3 & -\frac{1}{2} & 16 & 0 & 0 & -1 & 1 & 0 \\ 0 & -\frac{5}{2} & 56 & 1 & 0 & \mathbf{2} & -6 & 0 \\ 0 & -\frac{1}{4} & \frac{16}{3} & 0 & 1 & \frac{1}{3} & -\frac{2}{3} & 0 \\ 1 & \frac{5}{2} & -56 & 0 & 0 & -2 & 6 & 1 \end{array} \right)$$

$$T_6 = \left(\begin{array}{c|cccccccc} & x_1 & x_2 & x_3 & x_4 & x_5 & x_6 & x_7 \\ \hline 3 & -\frac{7}{4} & 44 & \frac{1}{2} & 0 & 0 & -2 & 0 \\ 0 & -\frac{5}{4} & 28 & \frac{1}{2} & 0 & 1 & -3 & 0 \\ 0 & \frac{1}{6} & -4 & -\frac{1}{6} & 1 & 0 & \frac{1}{3} & 0 \\ 1 & 0 & 0 & 1 & 0 & 0 & 0 & 1 \end{array} \right)$$

$$T_7 = \left(\begin{array}{c|cccccccc} & x_1 & x_2 & x_3 & x_4 & x_5 & x_6 & x_7 \\ \hline 3 & -\frac{3}{4} & 20 & -\frac{1}{2} & 6 & 0 & 0 & 0 \\ 0 & \frac{1}{4} & -8 & -1 & 9 & 1 & 0 & 0 \\ 0 & \frac{1}{2} & -12 & -\frac{1}{2} & 3 & 0 & 1 & 0 \\ 1 & 0 & 0 & 1 & 0 & 0 & 0 & 1 \end{array} \right)$$