

$$S^T \cdot A \cdot S = \left(\begin{array}{cccc} 1 & & & \\ \underbrace{r_+(s)}_{-mal} \quad \dots & & & \\ & 1 & & \\ & & -1 & \\ & & \underbrace{r_-(s)}_{-mal} \quad \dots & \\ & & & -1 \\ & & & & 0 \\ & & & & \underbrace{r_0(s)}_{-mal} \quad \dots \\ & & & & & 0 \end{array} \right)$$