

$$\det \begin{pmatrix} a & b \\ c & kd \end{pmatrix} = \frac{1}{adk - bc} \begin{pmatrix} kd & -b \\ -c & a \end{pmatrix}$$

$$\det(A) \quad \boxed{A^{-1}K}$$

$$\det(A) + \det(K)$$

$$A = \begin{pmatrix} \text{cov}(f'(t)/2) & \\ & \text{cov}(f''(t))/2 \end{pmatrix} + \begin{pmatrix} \text{cov}(f'(t))/2 & \\ & \text{cov}(f''(t))/2 \end{pmatrix}$$

Adding in the f', f''

$$K = \begin{pmatrix} \text{cov}(f'(t)) & \\ & \text{cov}(f''(t)) \end{pmatrix}$$

same constant

$$= \text{cov}(f'(t)/2, f''(t)/2, Z)$$

+