

$$\langle \delta_m \delta_m^T \rangle \approx? \quad (A^T N A)^{-1} \Rightarrow V D V^T = A^T N^{-1} A \quad \text{if linear}$$

Curvature for
parameter step guesses

$\propto A_m^T N^{-1} A_m$ if not linear
but not too bad

$$\langle A_m - d_e \rangle (A_m - d_e)^T$$

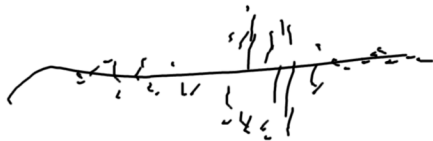
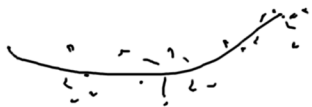
$$r = d - A_m$$

\downarrow
predicted data

$$N = r^2 \Rightarrow \text{good?}$$

$$A^T N^{-1} d$$

$$\propto \langle I^2 \rangle$$



$$f(k) = \int_0^{\pm i\hbar\gamma (2\pi?) } f(x) dx \Rightarrow \text{continuous}$$

$$\Rightarrow f(k) = \sum_{x=0}^{N-1} f(x) e^{-2\pi i k x / N} \quad \begin{matrix} x \in [0, N-1] \\ k \in [0, N-1] \end{matrix}$$

$$F = A f$$

$$A_{mn} = ?$$

$$= \frac{e^{-2\pi i m n}}{N}$$

A is symmetric

1st row : $\int_0^{\pm i\hbar\gamma (2\pi?) } e^{-2\pi i k x / N} \Rightarrow 1 \text{ period}$
 2nd row : $e^{-2\pi i k x / N} \Rightarrow 2 \text{ periods}$
 3rd row : $e^{-2\pi i k x / N} \Rightarrow 3 \text{ periods}$
 .
 .
 .
 etc,

dot product of different columns?

$$(A_m)^T (A_n) = \begin{cases} e^{-2\pi} \\ \times \end{cases}$$