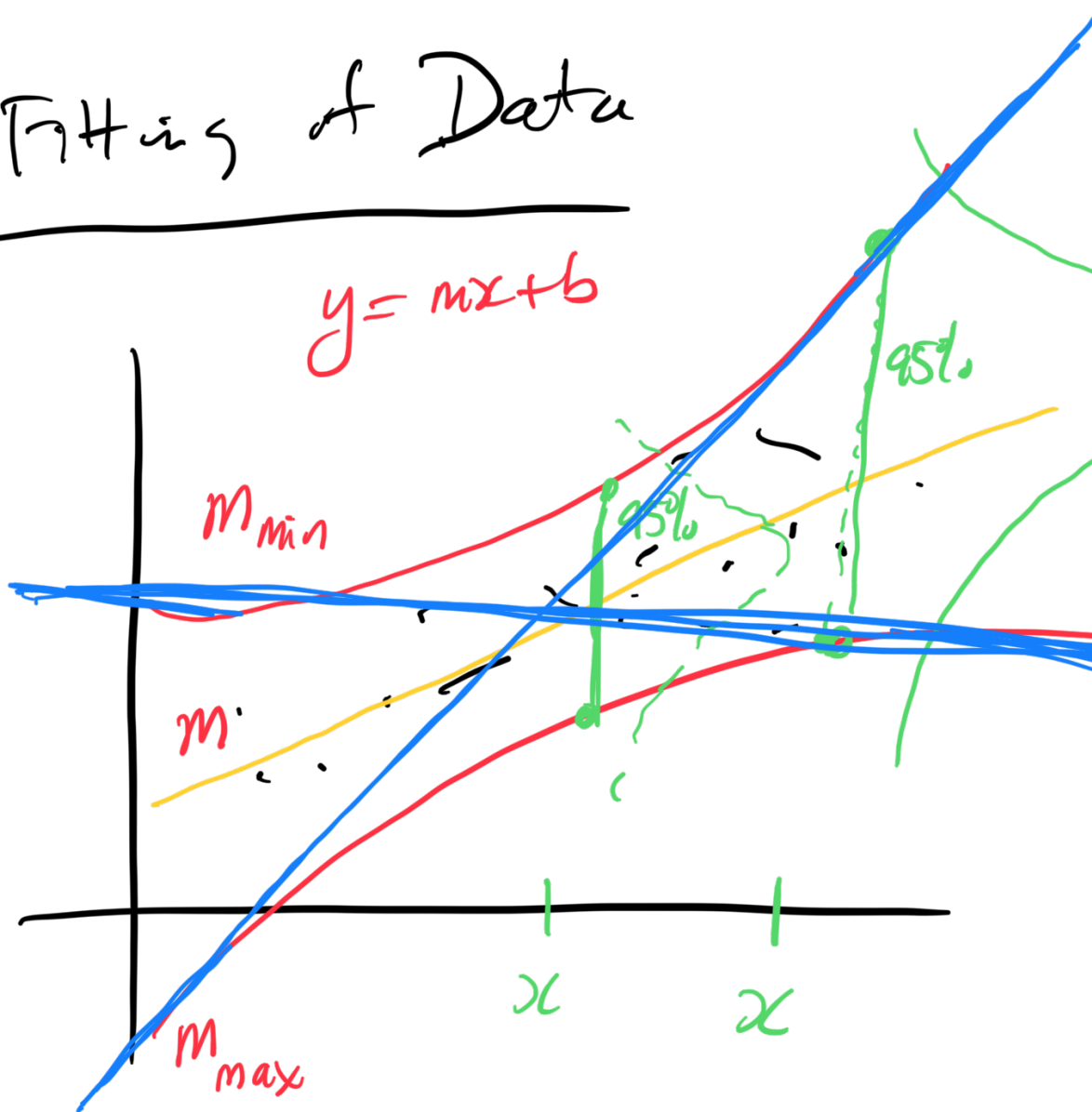


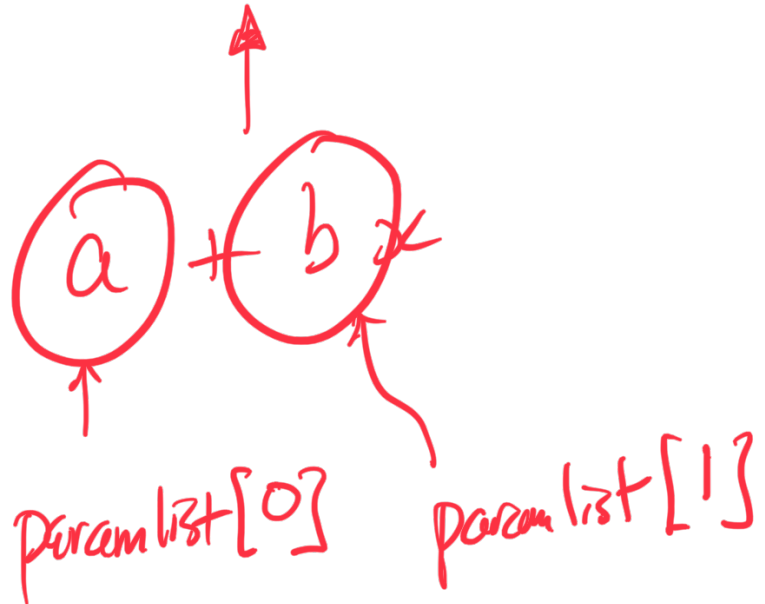
Physics 341 - Lecture 30

Fitting of Data



fit function.

$$y_{\text{fit}} = f(x)$$



0	$\text{paramlist}[0]$
1	$\text{paramlist}[1]$
2	
3	
4	
5	
6	

$\text{pop}t [\quad]$
 ↑
 array of the best fit parameters.

→ pcov

$$\begin{bmatrix} - & - \\ - & - \end{bmatrix} \quad \begin{matrix} \uparrow \\ \text{covariance matrix.} \end{matrix}$$

$$SS_{\text{TOTAL}} = (N-1) \text{var}(\text{---})$$

$$r^2 \equiv \text{correlation coefficient}$$

$$\begin{matrix} \uparrow \\ 0 \leq r^2 \leq 1 \end{matrix}$$

$$SS_{\text{model}} = (r^2) SS_{\text{TOTAL}}$$

