

20 noise tensors

20 different "true" params

fwdODEsol

+

For each pure signal,
make 20 noisy signals

20 x 20 signals generated

$y_{i,j}$, for $i = 1 \dots 20$ noises
 $j = 1 \dots 20$ true params

Loss =

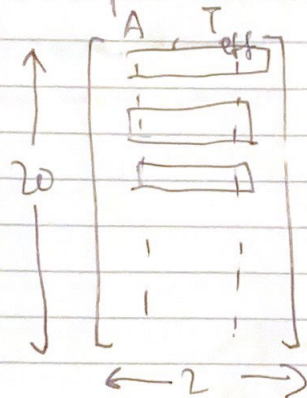
$$\underset{(\bar{p}_{i,j}, W)}{\operatorname{argmin}} \frac{1}{2 \times 20 \times 20} \left\| W \left(\hat{y}(\bar{p}_{i,j}) - y_{i,j} \right) \right\|^2 + \beta \|W\|_1 + \frac{\rho^2}{2} \|\bar{p} - \bar{p}_0\|^2$$

where $\bar{p}_0 = \{p_j^{\text{true}}\}_{j=1 \dots 20}$

↓ Compute

$$\text{Error} = \frac{1}{2 \times 20 \times 20} \sum_{i=1}^{20} \sum_{j=1}^{20} \left\| \bar{p}_{i,j}(w_{\min}) - p_j^{\text{true}} \right\|^2$$

" " theta parameter in fwdODEsol :



fwdODEsol should give :

