

**Stage 1:**  
**first learning level**  
simple training  
and predictions  $\tilde{\mathbf{y}}_m$

Model 1  
Model 2

...  
Model M



**I\*M = nb  
predictions**  
(I = nb instances)

**Stage 2:**  
**2nd learning level**  
optimise combination  
or feed new learner

**estimate this model:**

$$\hat{\mathbf{y}} = h(\tilde{\mathbf{y}}_1, \tilde{\mathbf{y}}_2, \dots, \tilde{\mathbf{y}}_M)$$

$\hat{h}$  is the aggregate  
meta model

**Stage 3:**  
**Forecast!**  
reverse operation:  
two step prediction

1. Make the forecasts  
at indiv. learner  
level
2. Feed the forecasts  
to the second  
model  $\hat{h}$