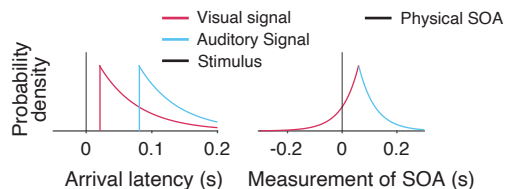
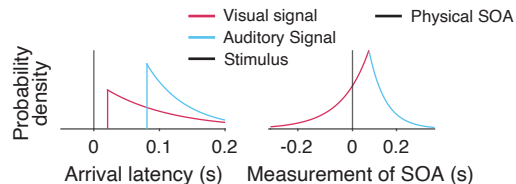


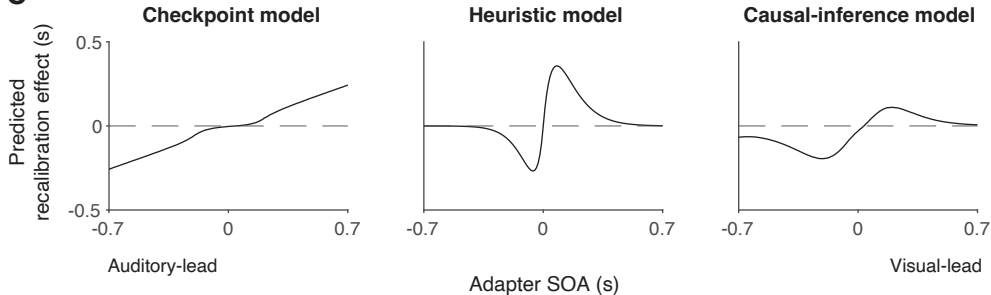
## A Modality-independent-precision model



## B Modality-specific-precision model



## C



Bias  
update rule

$$\Delta = \begin{cases} \Delta - \alpha m, & \text{if } |m| > c \\ \Delta, & \text{if } |m| \leq c \end{cases}$$

$$\Delta = -P(m|\text{SOA} = 0)\alpha m$$

$$\Delta = \alpha(\hat{s} - m)$$

$\Delta$  = recalibration effect (post-test bias - pre-test bias);  $\alpha$  = learning rate;  
 $c$  = simultaneity criterion;  $m$  = measurement of SOA;  $\hat{s}$  = estimate of SOA