

PAST

FUTURE

Measured output ( $y$ )

Present time

Set-point (Target)

Predicted output ( $\hat{y}$ )

Control move ( $\Delta u$ )

Input constraints

$k-3$

$k$

$k+1$

$k+M$

$k+P$

Control Horizon ( $M$ )

Time

Manipulated input ( $u$ )

Prediction Horizon ( $P$ )

