

**Predefined  
trajectory**

$x^{ref}$

**MPC**

$u$

**Thrust  
allocation**

$\omega$



**DF-GP**

$$\min \sum \eta_i ||\mu_{gpi} - \Delta||^2 \leftarrow \begin{matrix} \mu_{gp1}(x, u, \lambda_1) \\ \mu_{gp2}(x, u, \lambda_2) \\ \mu_{gp3}(x, u, \lambda_3) \\ \vdots \\ \mu_{gpN}(x, u, \lambda_N) \end{matrix}$$

$x$