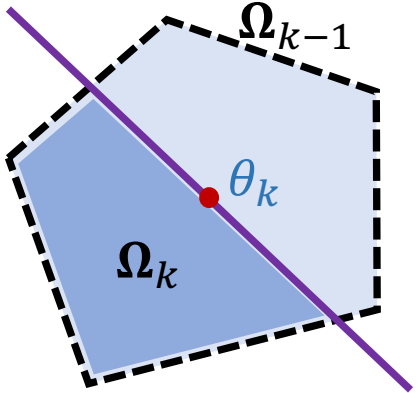

Update search space
$\boldsymbol{\Omega}_{k-1} \rightarrow \boldsymbol{\Omega}_k$

Choose a guess
$\theta_k \in \boldsymbol{\Omega}_{k-1}$

Robot motion planning with current cost function $J(\theta_k)$

Trajectory
ξ_{θ_k}

While robot executes the trajectory ξ_{θ_k}

A user applies directional corrections $\overline{\boldsymbol{a}}_k$

$\overline{\boldsymbol{a}}_k$
ξ_{θ_k}

Compute the cutting hyperplane:
$\langle h_k, \theta \rangle + b_k = 0$

$\langle h_k, \theta \rangle + b_k = 0$