Name	Description	Properties	Usefulness (subjective)
Certainty Equivalence	Control as if the mean (or median or mode) is the true state	Optimal for LQG	****
QMDP	Full observability after 1 step (hindsight knowledge of state uncertainty)	Upper bound on true value	****
Hindsight Optimization	Hindsight knowledge of state and outcome uncertainty	Looser upper bound than QMDP	****
Fast Informed Bound (FIB)	Take one observation into account	Tighter upper bound than QMDP	***
<i>k</i> -Markov	Pretend the last \boldsymbol{k} observations make up the state and solve the MDP	Great for Atari!	****
Open Loop	Choose a sequence of actions that optimizes the objective in expectation	Good if alleatory is low, epistemic is hard to reduce	***
Most likely observation	Plan assuming $b' = au(b,a,\hat{o}(b))$	No observation branching; Good when ${\it Z}$ unimodal	***