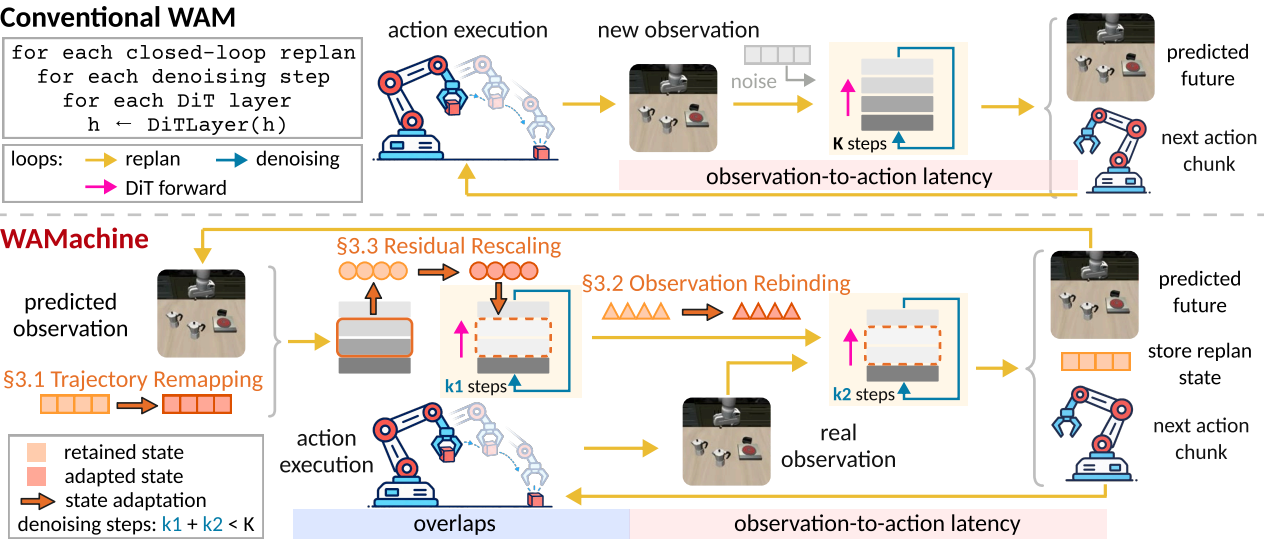

Conventional WAM
for each closed-loop replan
for each denoising step
for each DiT layer
h ← DiTLayer(h)
loops:
replan
denoising
DiT forward
action execution
new observation
noise
K steps
predicted future
next action chunk
observation-to-action latency
WAMachine
predicted observation
§3.1 Trajectory Remapping
§3.3 Residual Rescaling
k1 steps
§3.2 Observation Rebinding
k2 steps
predicted future
store replan state
next action chunk
action execution
real observation
retained state
adapted state
state adaptation
denoising steps: k1 + k2 < K
overlaps
observation-to-action latency