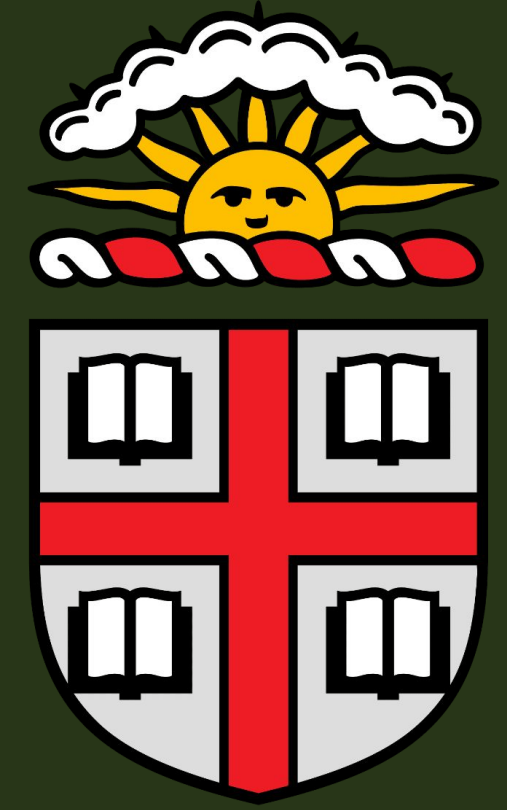




TAP-MPC: Transferable Action Priors For Model Predictive Control with World Models

→ Intro

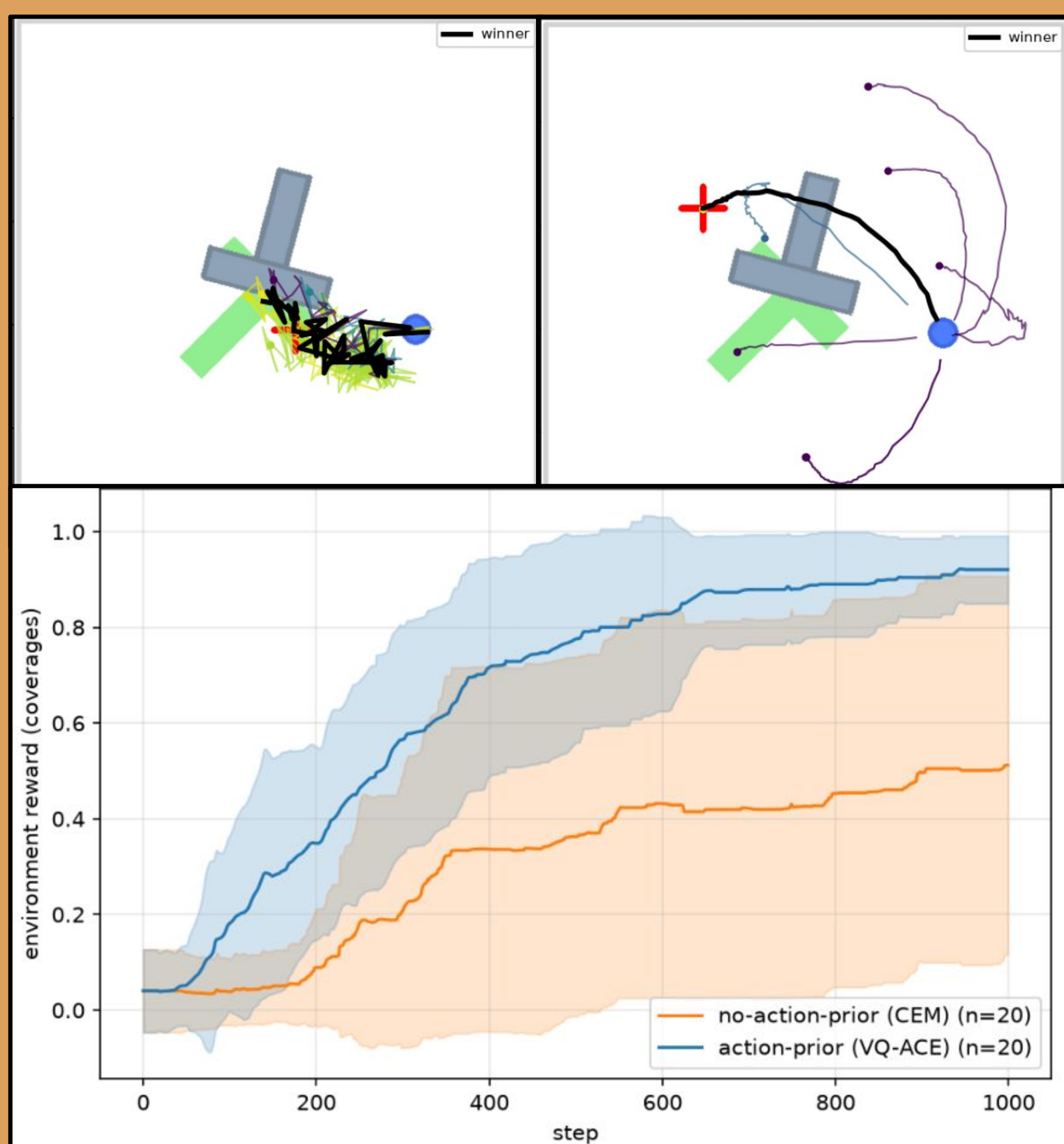
- World Models have no way of generating useful actions during MPC

→ Method

- Train an action prior using VQ-VAE.
- Rollout samples in a world model.
- Refine the best rollout with MPC.
- Execute best performing action sequence.

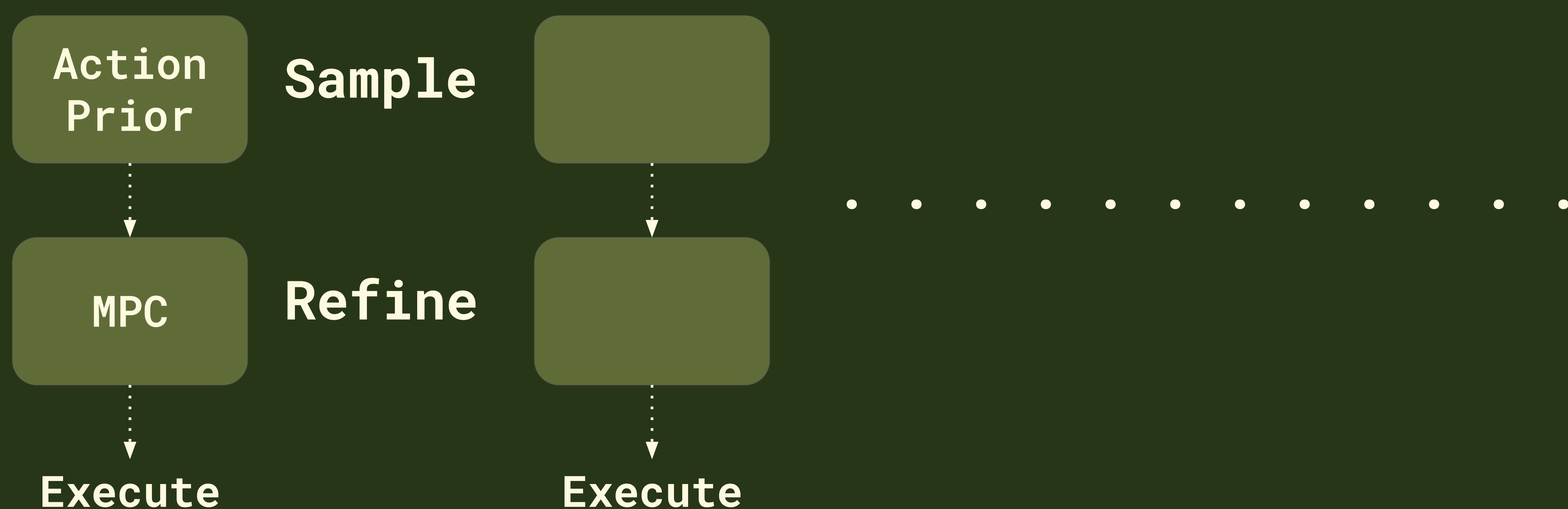
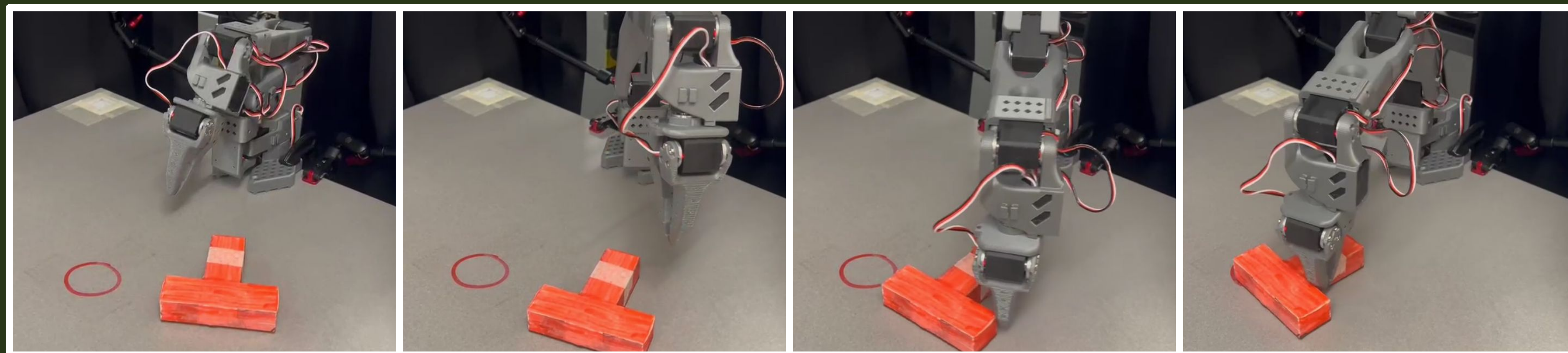
→ Results

- Sampling from a prior outperforms MPC with delta actions on average.



Findings

World Models alone are not enough for manipulation.
Action Priors make planning tractable.



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