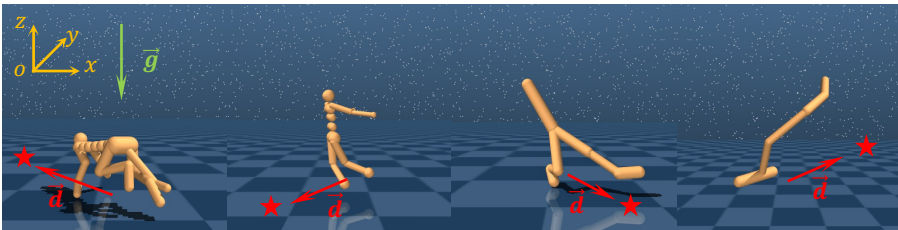


(a) 2D Planar Locomotion Environments



(b) 3D Subequivariant Locomotion Environments

Table 1. Comparison in the problem setup.

		2D-Planar	Our 3D-SGRL
State Space	Range	$xoz$ -plane	3D space
	Initial	$x^+$ -axis	Arbitrary direction
	Target	$x^+$ -axis	Arbitrary direction
Action Space	# Actuators	1 per joint	3 per joint
	DoF	1 per joint	3 per joint
Symmetry	External Force	NULL	Gravity $\vec{g}$ , Target $\vec{d}$
	Group	$\emptyset$	$O_{\vec{g}}(3)$