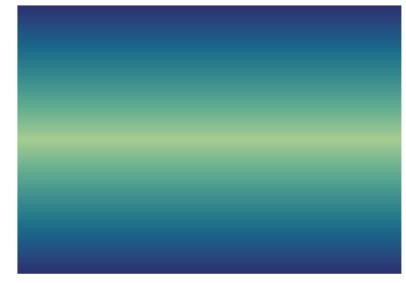


(a) 自驱动能量



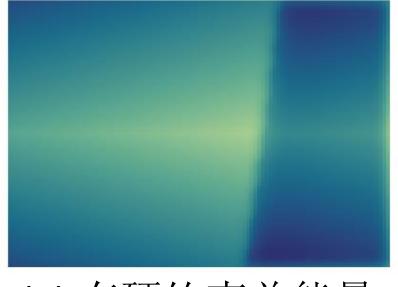
(b) 路径保持能量



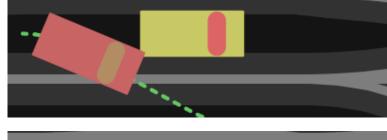
(c) 碰撞避免硬约束



(d) 无硬约束总能量



(e) 有硬约束总能量



(f) 对应时刻仿真截图