Supplementary Figures for "Models of benthic bipedalism"

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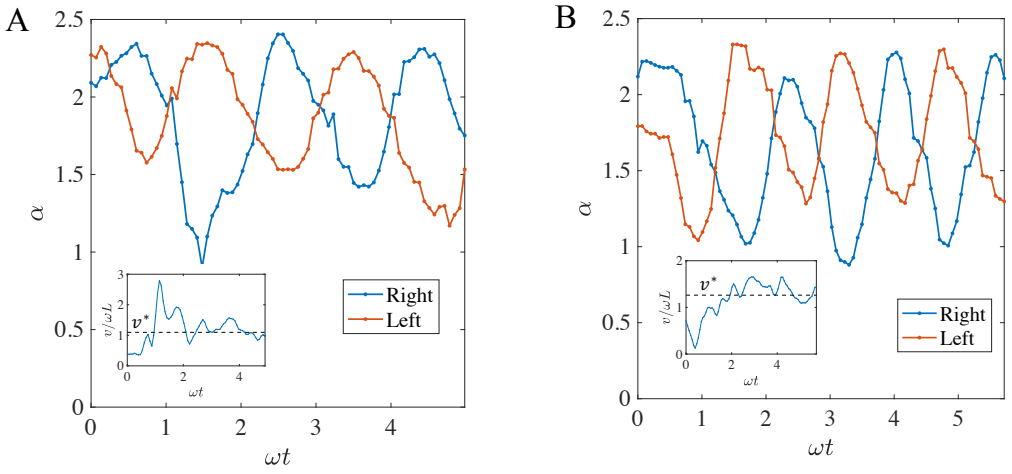

FIG. S1: **Locomotion kinematics of little skate A and B.**. These data are different specimen and runs from Fig. 1D. Left and right leg angles α as a function of dimensionless time and mean foot placement angle α_0. The inset shows the dimensionless speed of the pelvic girdle as a function of dimensionless time with v^* (dashed line) the approximate lower speed bound during steady state locomotion. Note that individuals A and B are different from the one corresponding to data in 1D.

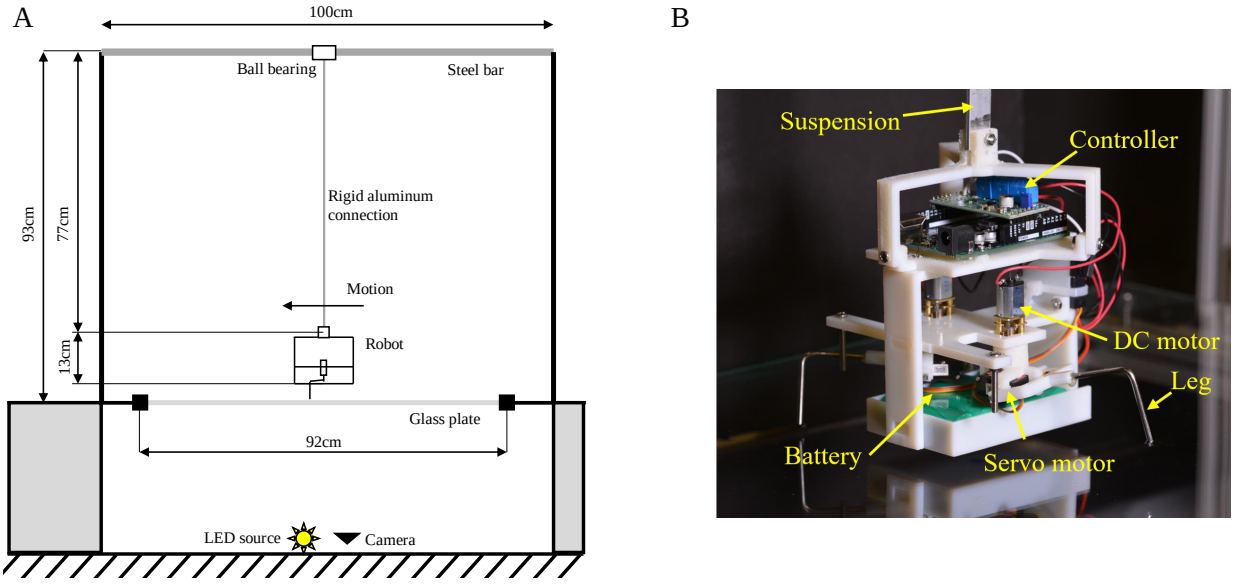

FIG. S2: **Sketch of experiment set-up (not to scale) and robot**. **A**. Robot is walking on a glass plate and filmed with a camera from below. A rigid aluminum beam supports the robot against gravity. The beam is connected via a ball bearing to a steel rod along which it can slide freely. **B** Robot walking on glass plate and its components.

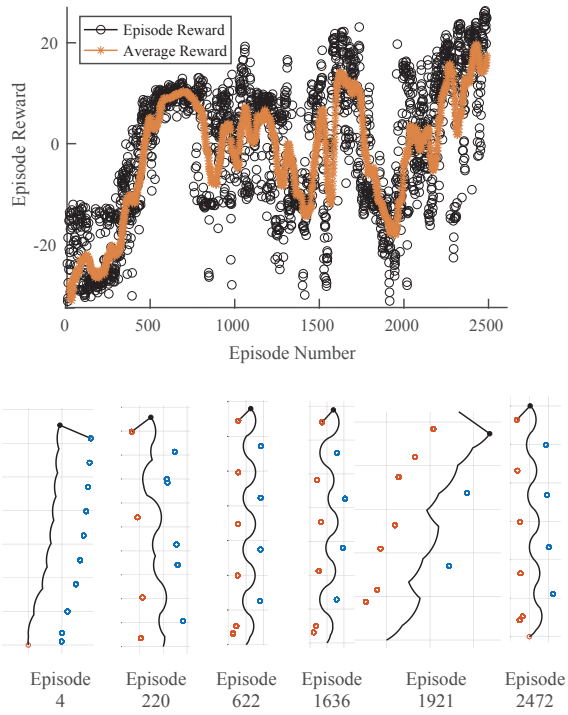

FIG. S3: **Sample learning progress**. Training progress of DDPG agent for the little skate model with inset showing center of mass trajectories and footfalls at different episodes during learning.

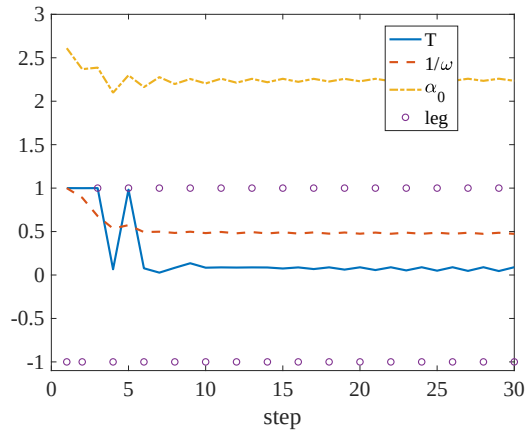

FIG. S4: **Control parameters of learned solution.** Control parameters of best episode learned from the DDPG agent as a function of step number. This solution corresponds to RL path shown in Fig.3.