Composite Motion Learning with Task Control

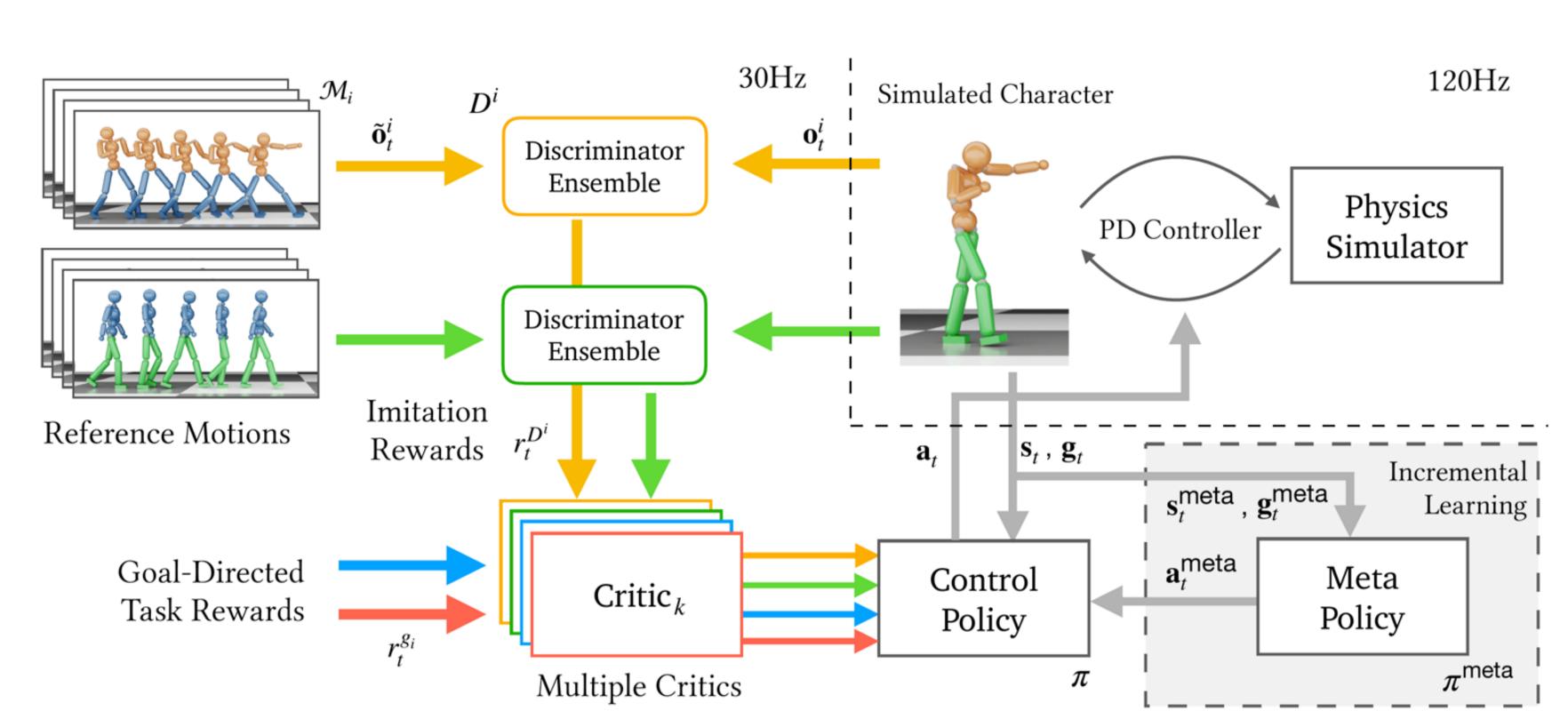
Pei Xu^{1,2}, Xiumin Shang³, Victor Zordan^{2,1,4}, Ioannis Karamouzas¹

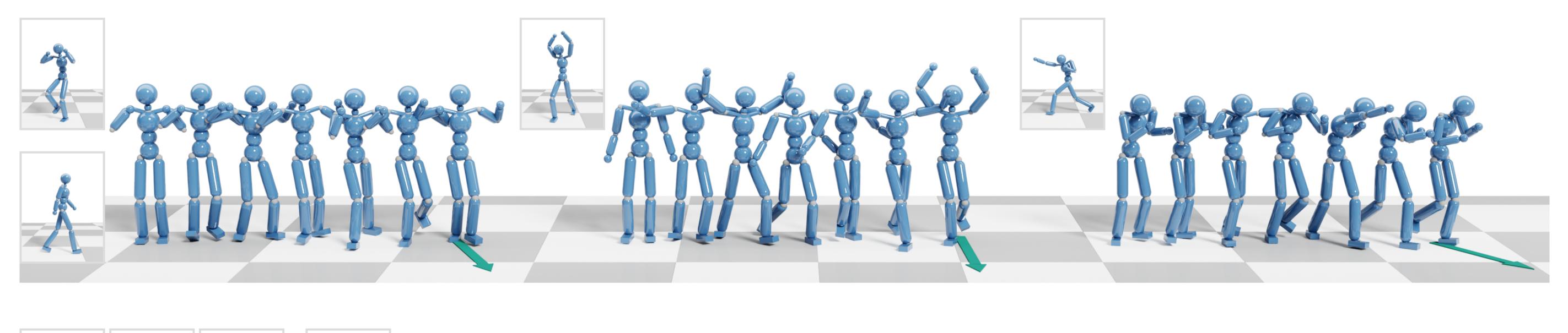


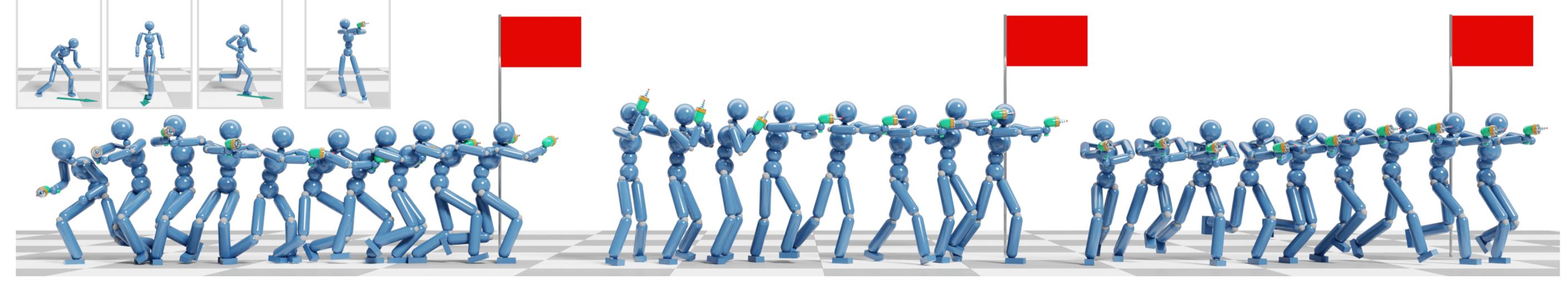


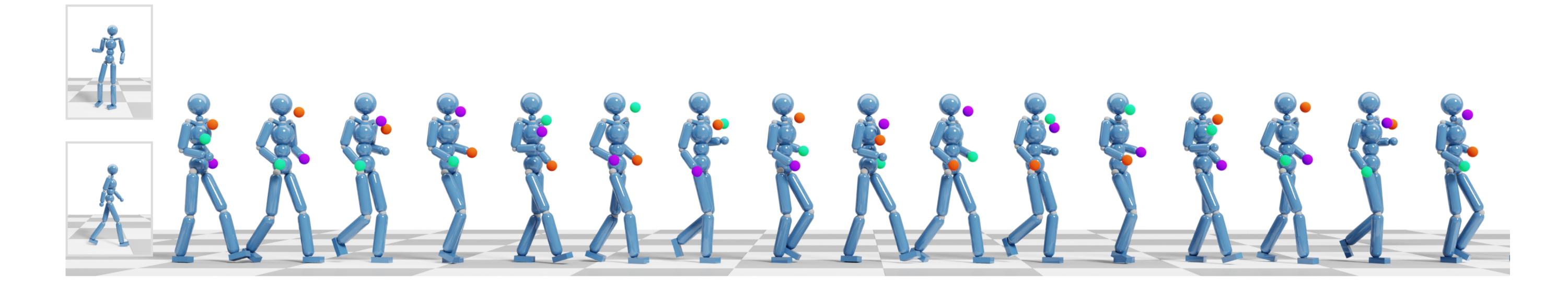


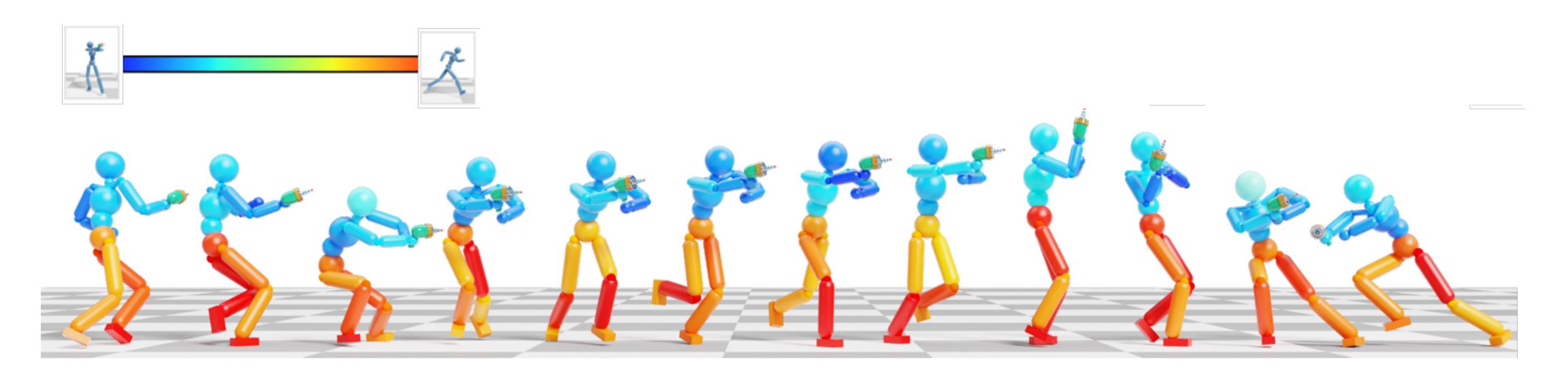
We present a multi-objective learning approach for composite and task-driven motion control for physically simulated characters. Without needing to manually blend reference motions, our approach learns composite motions directly from multiple reference sources across distinct body parts and supports sampleefficient training from pre-trained controllers in an incremental manner.













Acknowledgement

This work was supported by the National Science Foundation under Grant No. IIS-2047632 and by Roblox. Special thank to Roblox is a Roblem Robl for providing mocap data.

