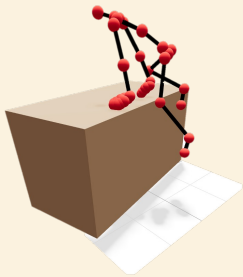


## Human Motions



LAFAN1 & OMOMO



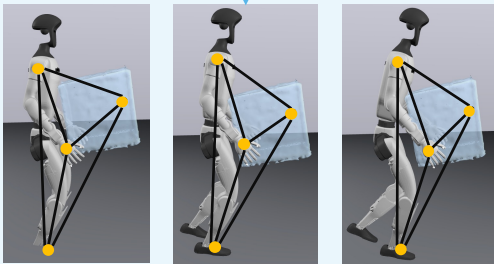
In-House MoCap

## Interaction Mesh Retargeting

Source Motion  
Mesh Laplacian  
 $L_{\text{source}}$



**Tetrahedra Mesh Matching**  
$$\min_{L_{\text{target}}} \|L_{\text{source}} - L_{\text{target}}\|^2$$
  
s. t. Kinematic Constraints



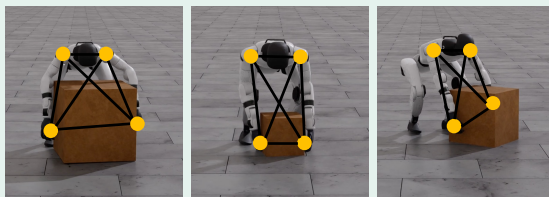
Optimization Process

## Efficient Augmentation (Optional)

$L_{\text{source}}$



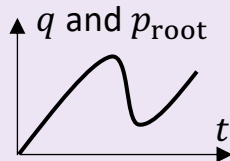
$$\min_{L_{\text{augm}}} \|L_{\text{source}} - L_{\text{augm}}\|^2$$
  
**Diverse Augmentation**  $\left\{ \begin{array}{l} \text{Terrain} \\ \text{Object Type} \\ \text{Spatial} \end{array} \right.$



Example of Spatial & Obj. Augm.

## RL Training

Kinematic  
Motion  
Reference

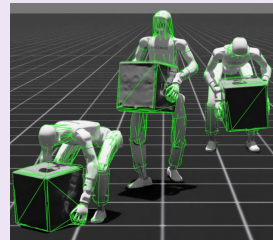
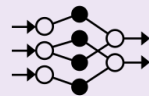


**Minimal  
RL Tracking**

5 Rewards  
4 DR Terms  
Proprio. Only

Policy

$\pi_{\theta}$



## Zero-Shot Sim2Real

