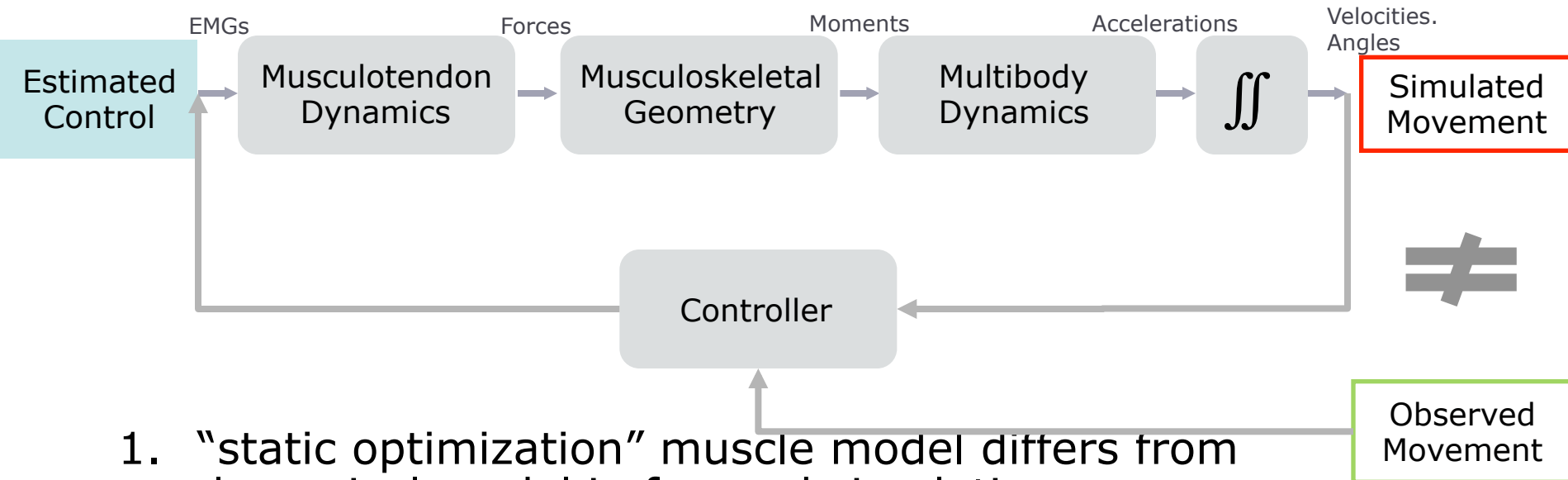




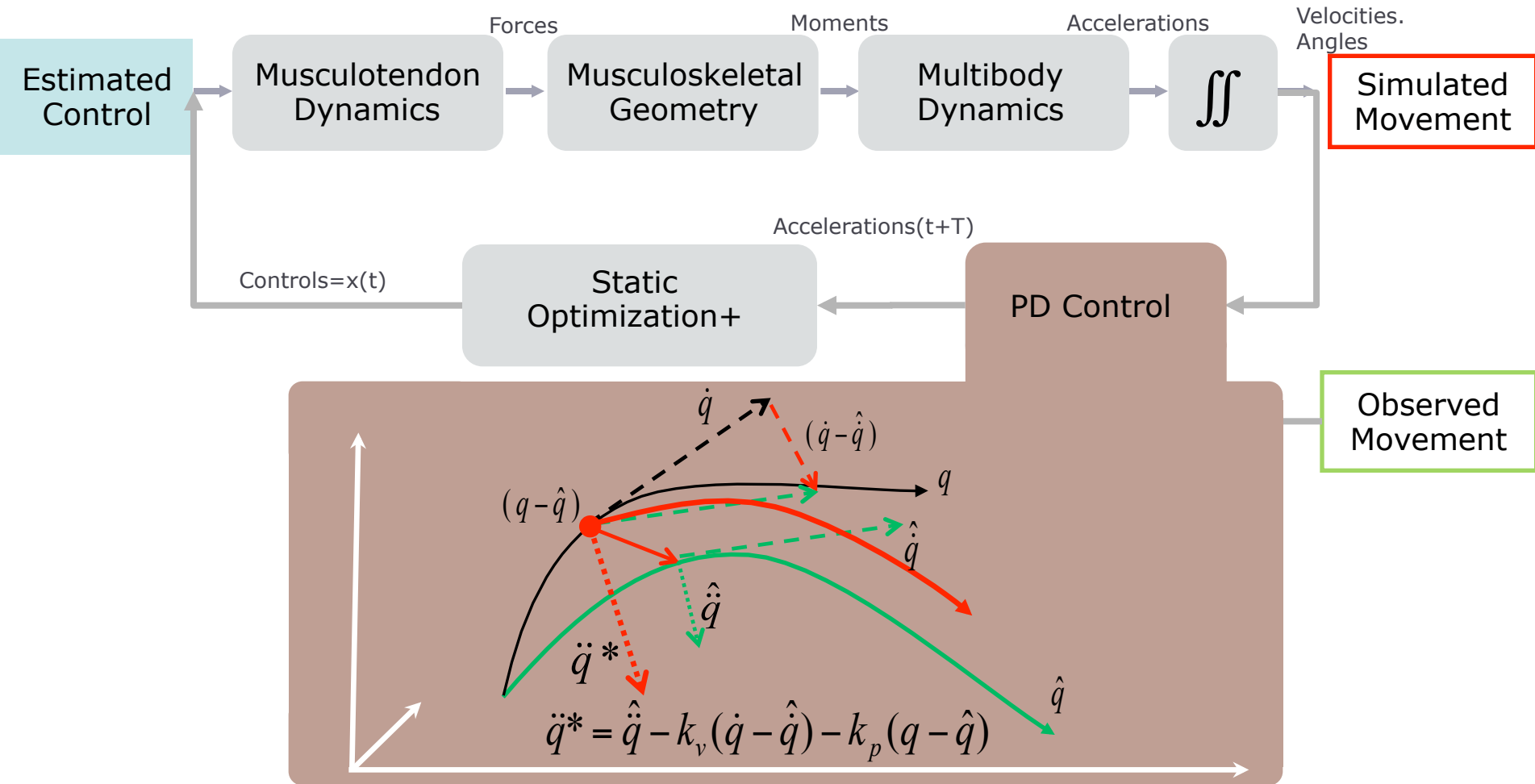
## Behind Computed Muscle Control

# Muscle-Driven Forward Simulation

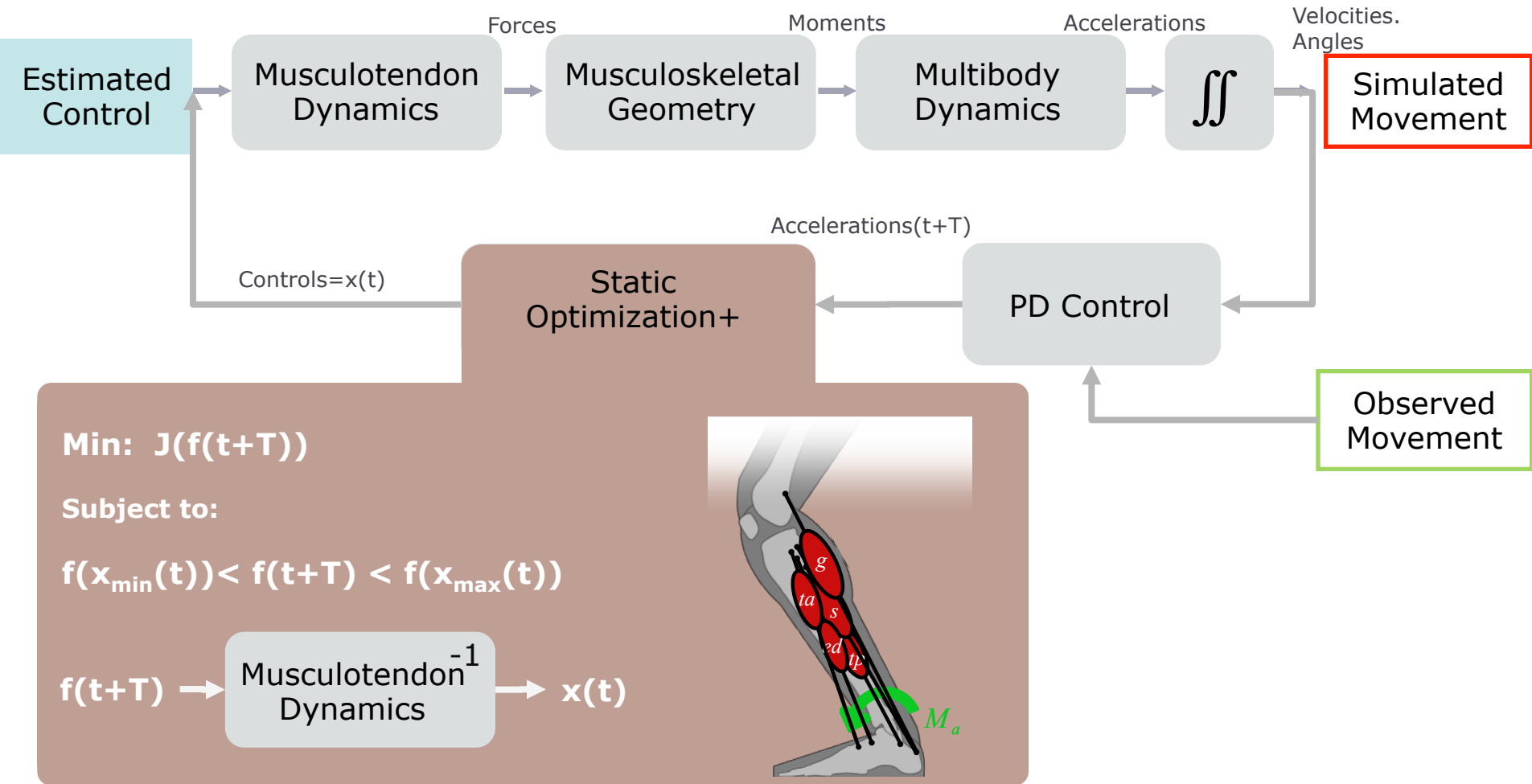


1. “static optimization” muscle model differs from dynamical model in forward simulation.
2. Acceleration data is discrete and noisy.
3. A nonlinear dynamical systems can be chaotic.

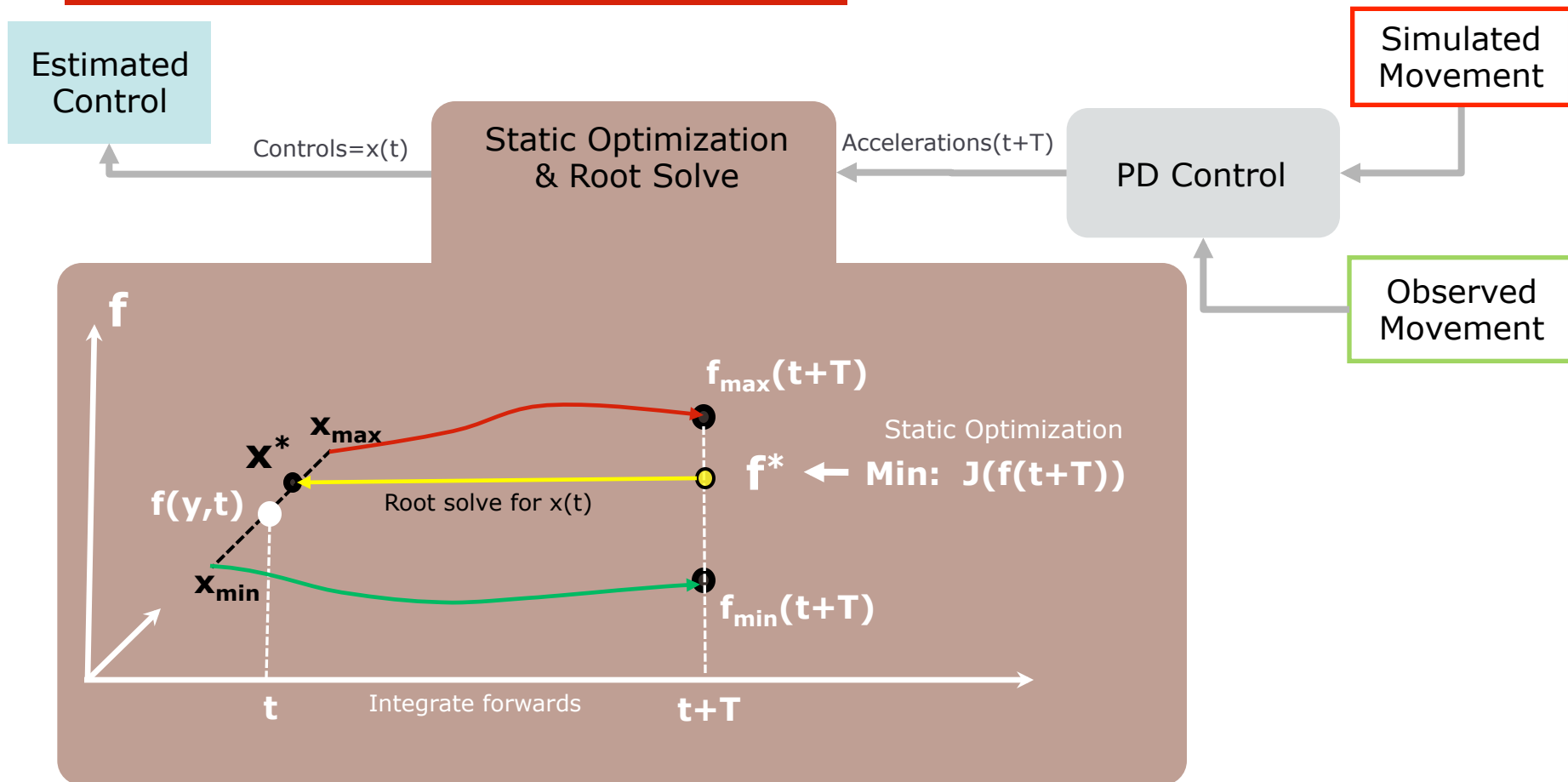
# Computed Muscle Control (CMC)



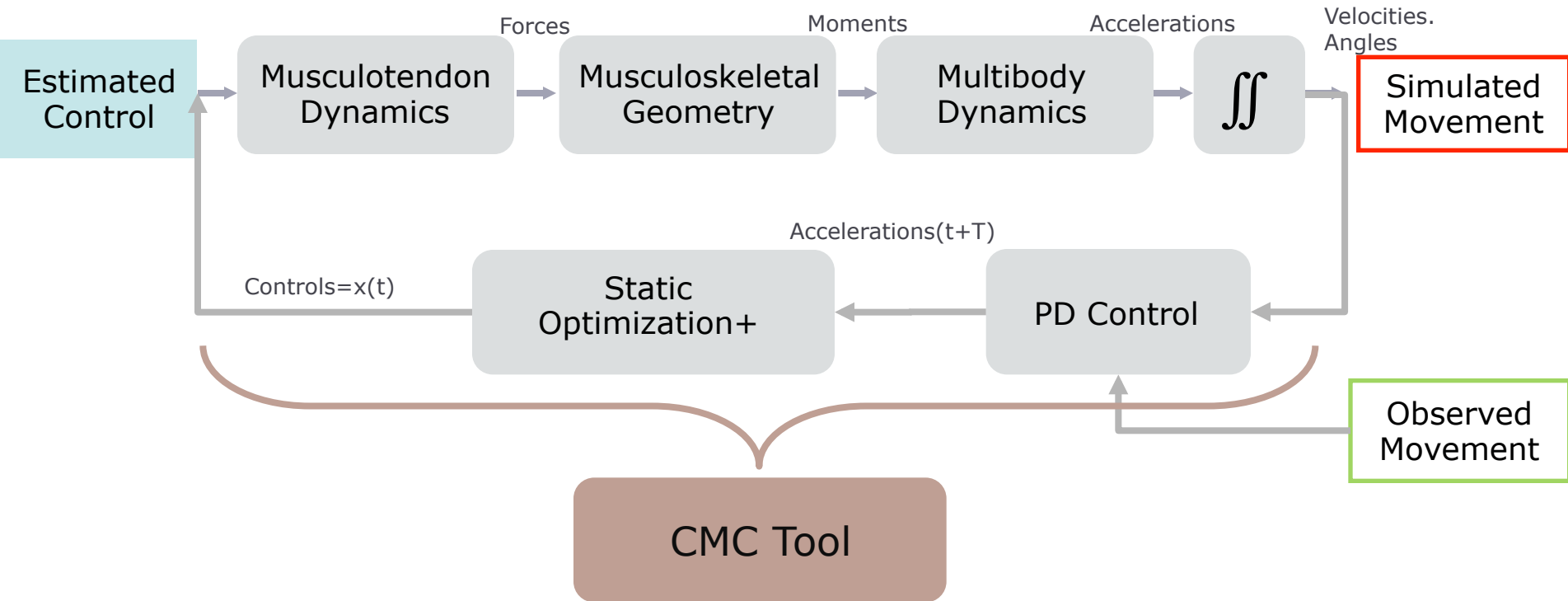
# Computed Muscle Control (CMC)



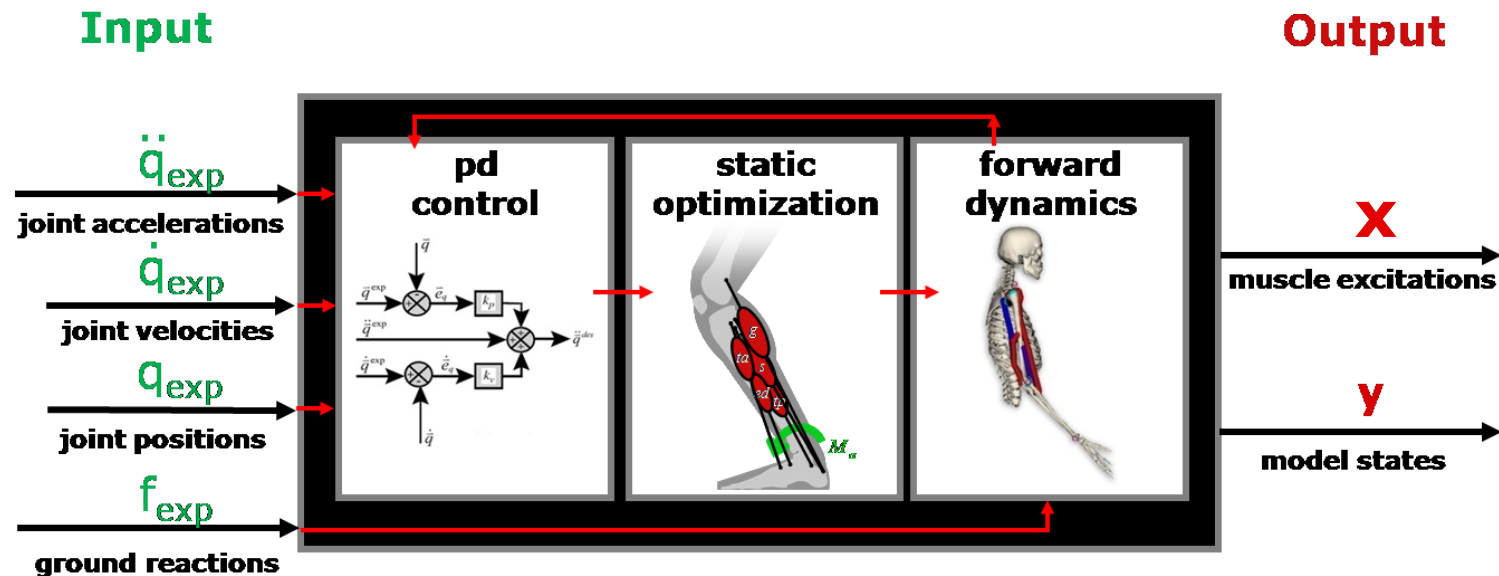
# Inside the CMC Algorithm



# Computed Muscle Control Tool:



# Computed Muscle Control



## TIPS & TRICKS

You can use results from IK or RRA. For best results, track RRA output not IK.

Increase max excitation of reserves if CMC is failing.

Compare to EMG and constrain excitations where there is a mismatch.

Command Line: `cmc -S cmc_setup_file.xml`