[[1]](#footnote-1)

Supplementary Material to:

Proprioceptive Control for Accurate Foothold Placement Aiding Fast-Legged Locomotion

Vinay R. Kamidi+ and Pinhas Ben-Tzvi\*

# Preliminaries and notation

This material complements the paper in []. It is a detailed description of the singularly perturbed model used in []. The equations presented in the accompanying paper are highlighted in red.

# Kinetic and potential energies

# Equations of motion

The equation of motion during swing phase in dependent generalized coordinates is given by:

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Here

# Singularly Perturbed Equations of motion

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