

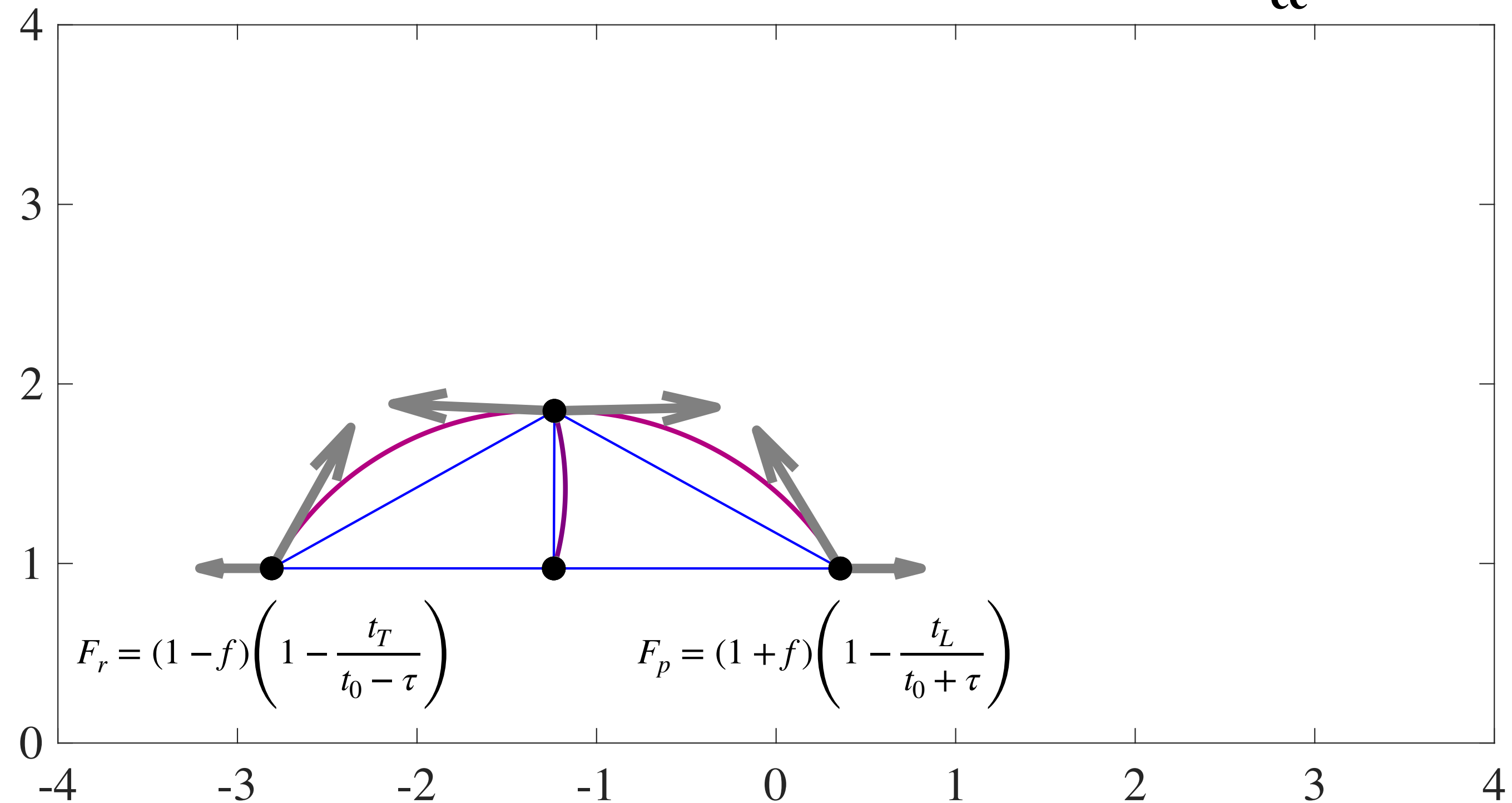
Equal cells (same tensions)
Zero f in protrusive and retraction forces

$$\mathbf{r}_L = 1.82, \mathbf{r}_T = 1.72, \mathbf{r}_{cc} = 1.5652$$

$$\mathbf{t}_L = 1, \alpha_L = 1.0269, \beta_L = 0.022111$$

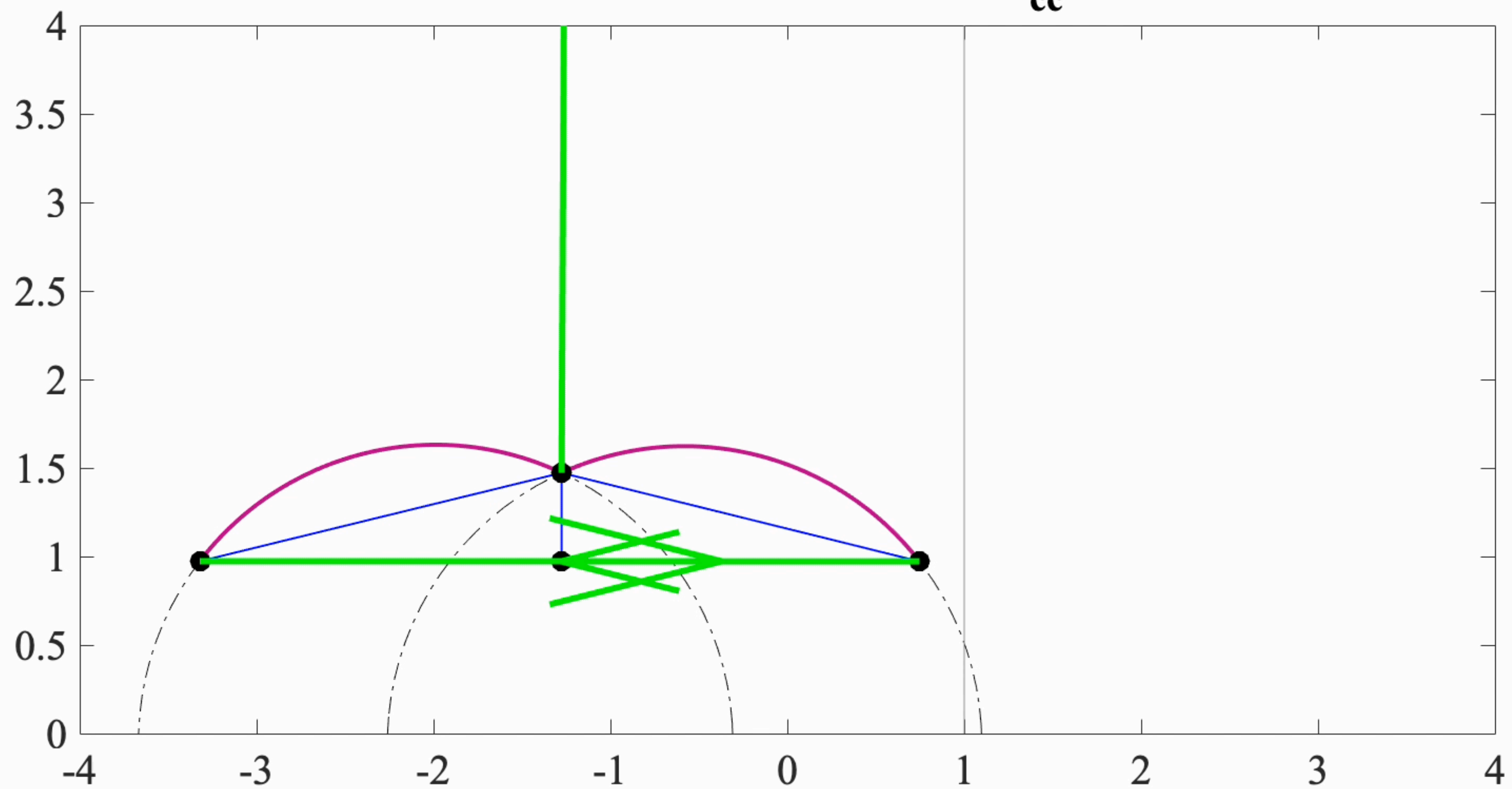
$$\mathbf{t}_T = 1, \alpha_T = 1.0596, \beta_T = 0.043398$$

$$\mathbf{x} = 0.28411, \gamma = 1.5669, \mathbf{w} = 0.0039057, \mathbf{h} = 0.87747, \mathbf{t}_{cc} = 0.05$$



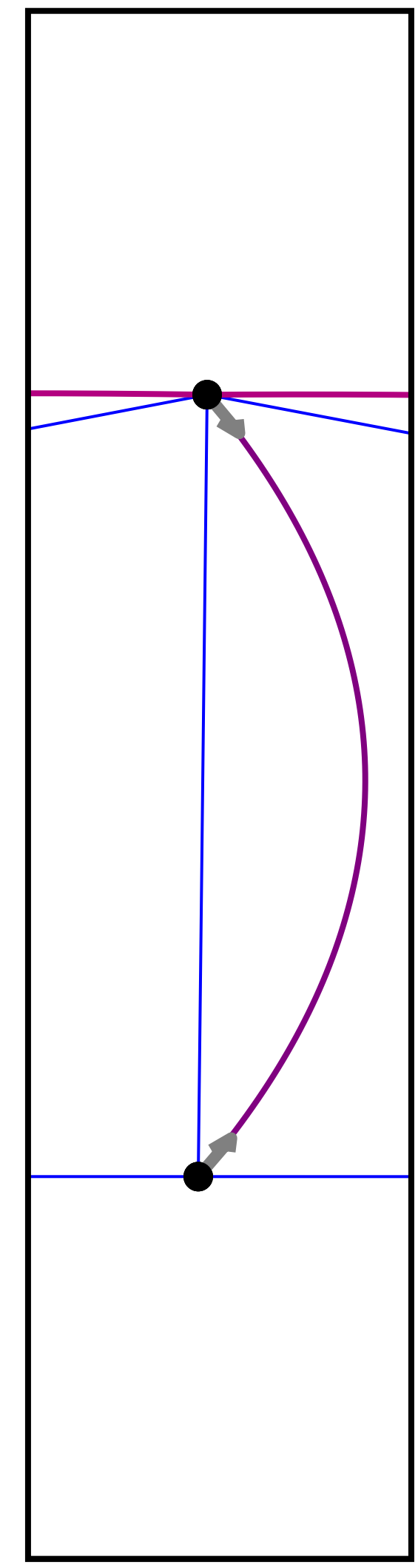
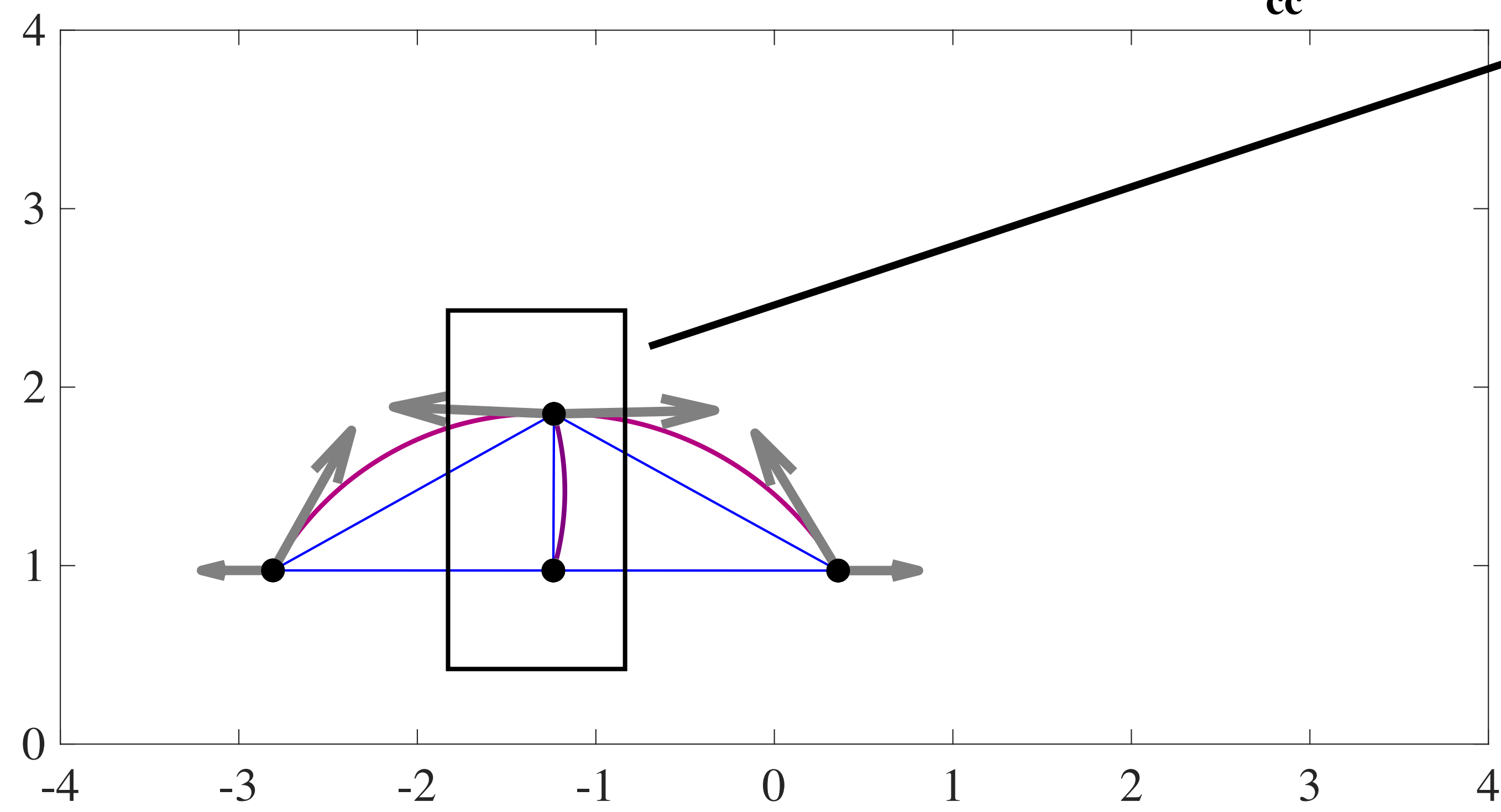
Forward locomotion

$r_L = 1.68, r_T = 1.68, r_{cc} = \text{Inf}$
 $t_L = 1, \alpha_L = 0.91146, \beta_L = 0.42754$
 $t_T = 1, \alpha_T = 0.91674, \beta_T = 0.43626$
 $\mathbf{x} = \mathbf{0}, \gamma = 1.5708, \mathbf{w} = \mathbf{0}, \mathbf{h} = 0.5, t_{cc} = 0.05$

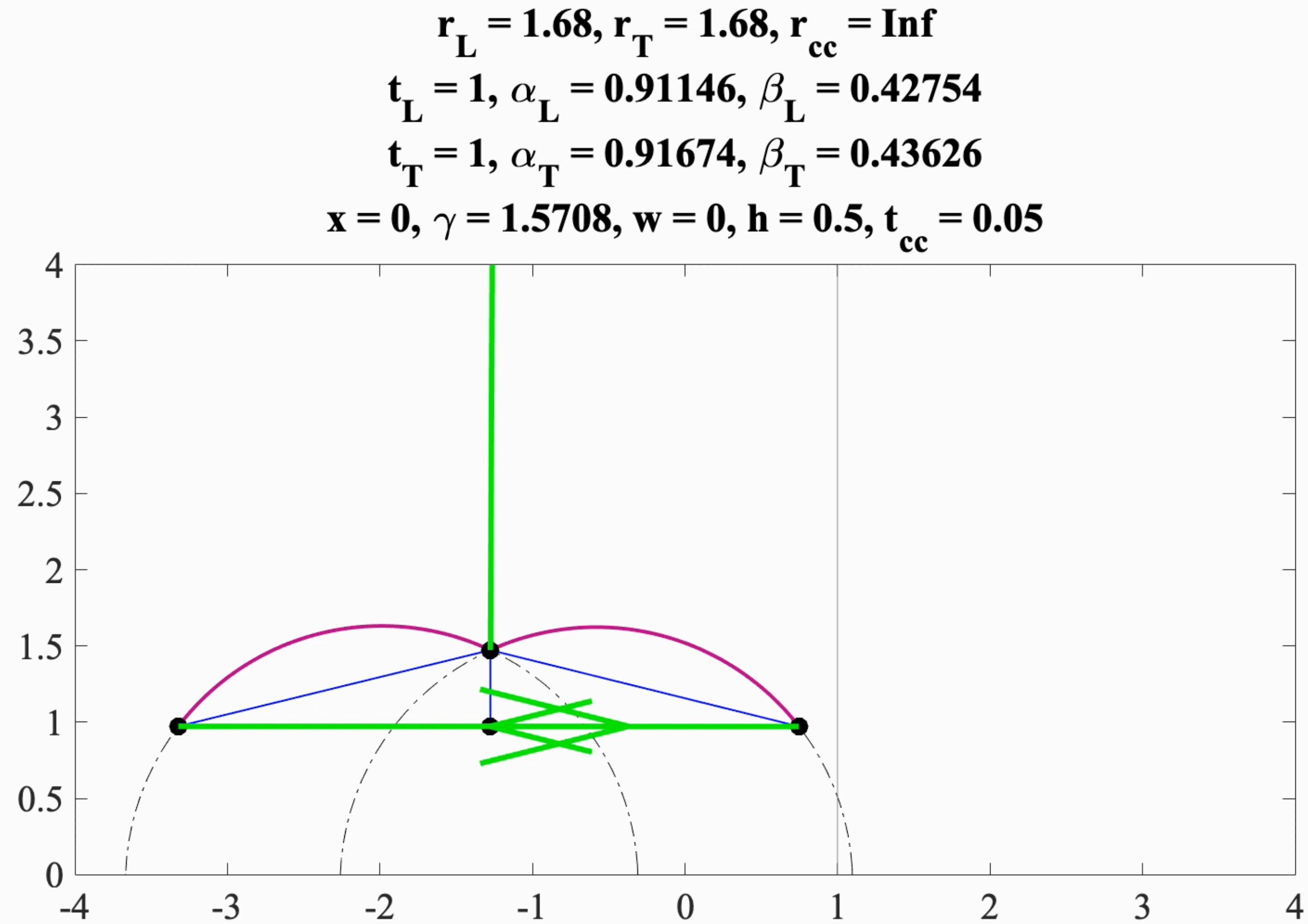


Why forward locomotion?

$r_L = 1.82, r_T = 1.72, r_{cc} = 1.5652$
 $t_L = 1, \alpha_L = 1.0269, \beta_L = 0.022111$
 $t_T = 1, \alpha_T = 1.0596, \beta_T = 0.043398$
 $x = 0.28411, \gamma = 1.5669, w = 0.0039057, h = 0.87747, t_{cc} = 0.05$



No forward locomotion if do not account for cell-cell curvature



But even more forward locomotion with lower cell-cell curvature

$$\begin{aligned} r_L &= 1.68, r_T = 1.68, r_{cc} = \text{Inf} \\ t_L &= 1, \alpha_L = 0.91146, \beta_L = 0.42754 \\ t_T &= 1, \alpha_T = 0.91674, \beta_T = 0.43626 \\ x &= 0, \gamma = 1.5708, w = 0, h = 0.5, t_{cc} = 0.9 \end{aligned}$$

