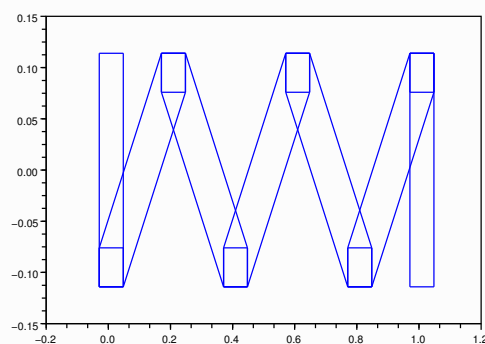
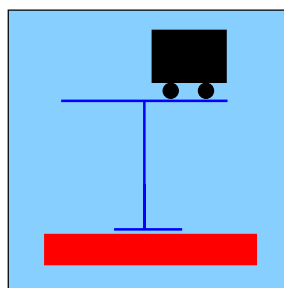


Walking parameters & Footprints

Constrained Quadratic Problem



Convex Contact
Polygon Constraints



Cart Model

Foot Position ($k+NL$)

CoM($k+NL$)
position

Inverse
Kinematics

Robot State
 $S(k+NL)$

ZMPref($k+NL$)

ΔZMP

FIFO

+

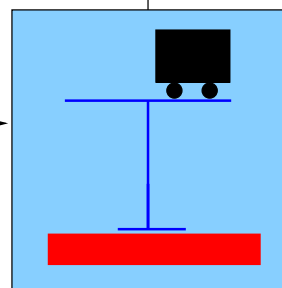
ZMP computed
from the Multibody model

-

$\Delta ZMP(k)$ $\Delta ZMP(k+NL)$

CoM($k+NL$)

Preview control



$\Delta CoMcorr(k)$

+

NewCoM($k+NL$)...NewCoM(k)

Inverse
Kinematics

FootPos($k+NL$)...FootPos(k)

Modified
Robot State
 $S(k)$

CoM($k+NL$)...CoM(k)

CoM(k)

FIFO

FIFO