1'st position of $F_B$

2'nd position of $F_B$

finger body $O$
(The obstacle is blue.)

can we stay in 2d?
Figure 6.1
Physical space (a) and configuration space (b): (a) A two-link planar robot arm has to move from the configuration start to end. The motion is thereby constraint by the obstacles 1 to 4. (b) The corresponding configuration space shows the free space in joint coordinates (angle $\theta_1$ and $\theta_2$) and a path that achieves the goal.