Day 06

Forward Kinematics

Transform Equations

$T\,^{1}_{2}$ $\{2\}$

$\{1\}$

$T\,^{0}_{1}$

$T\,^{4}_{2}$

$\{0\}$
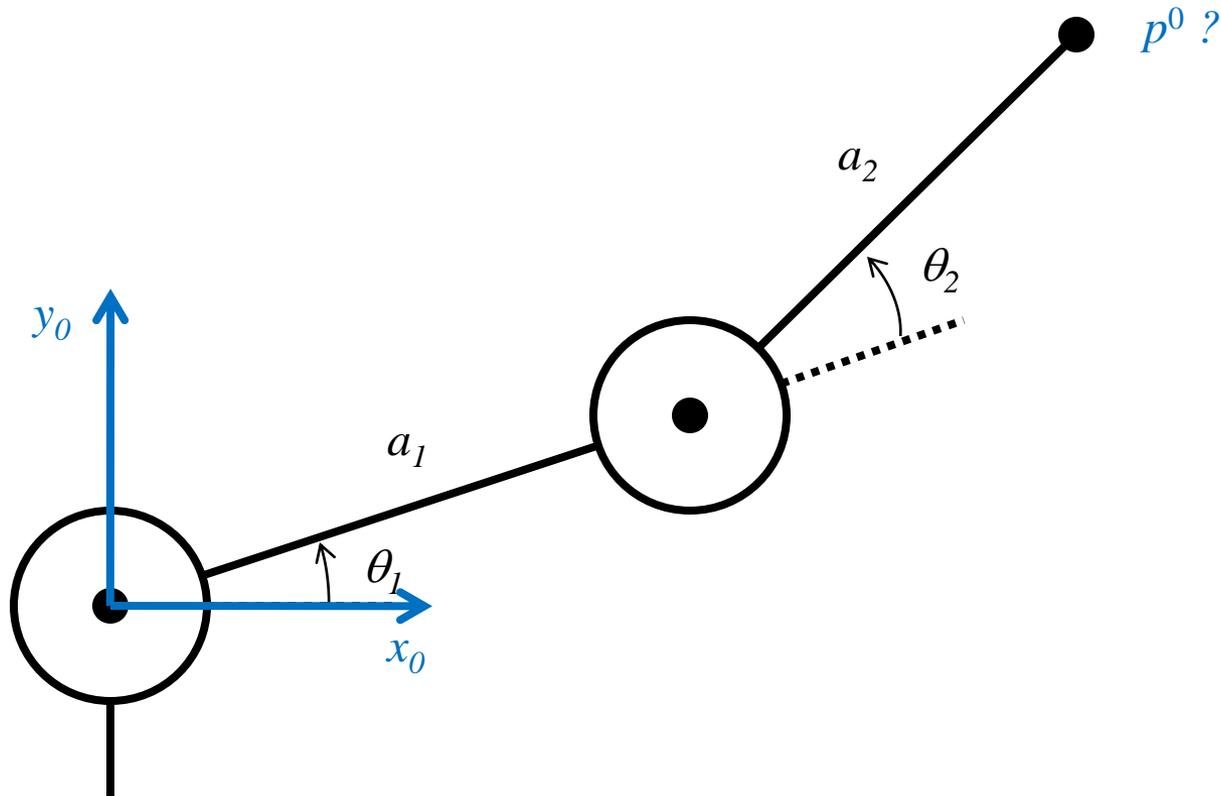
$T\,^{0}_{3}$

$T\,^{3}_{4}$

$\{4\}$

$\{3\}$

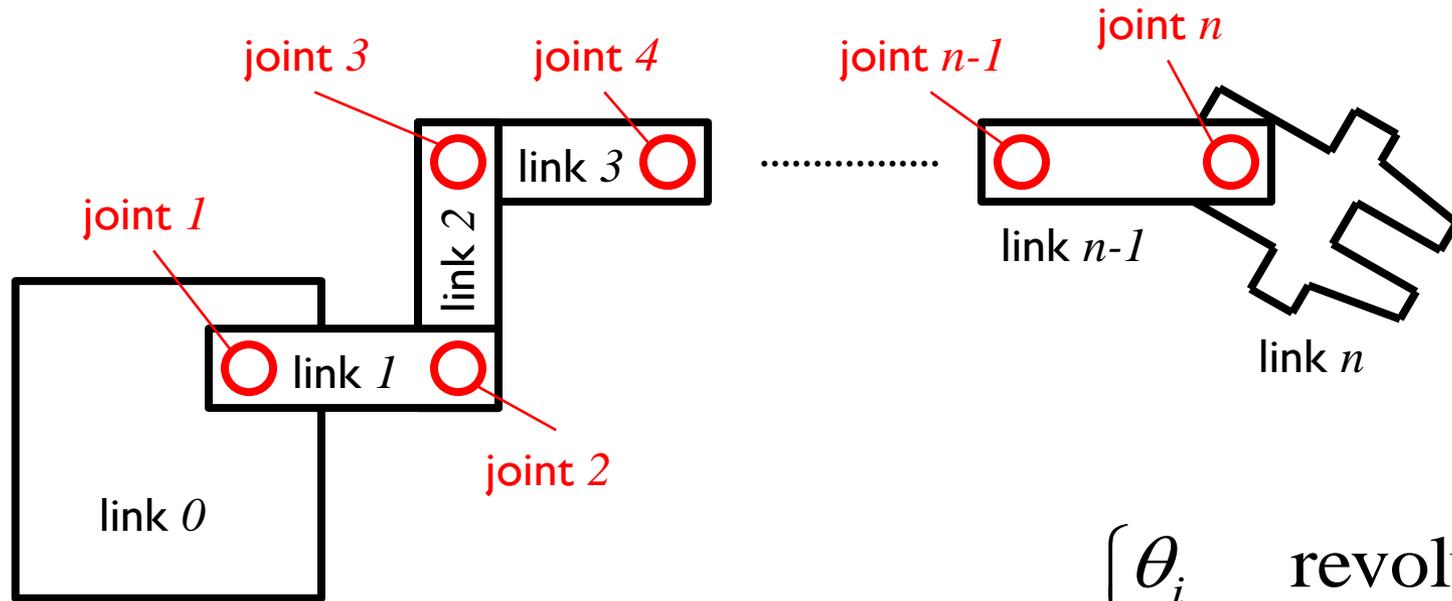# Transform Equations

T_1^0

T_2^0

T_3^2

{0}

{1}

{2}

{3}
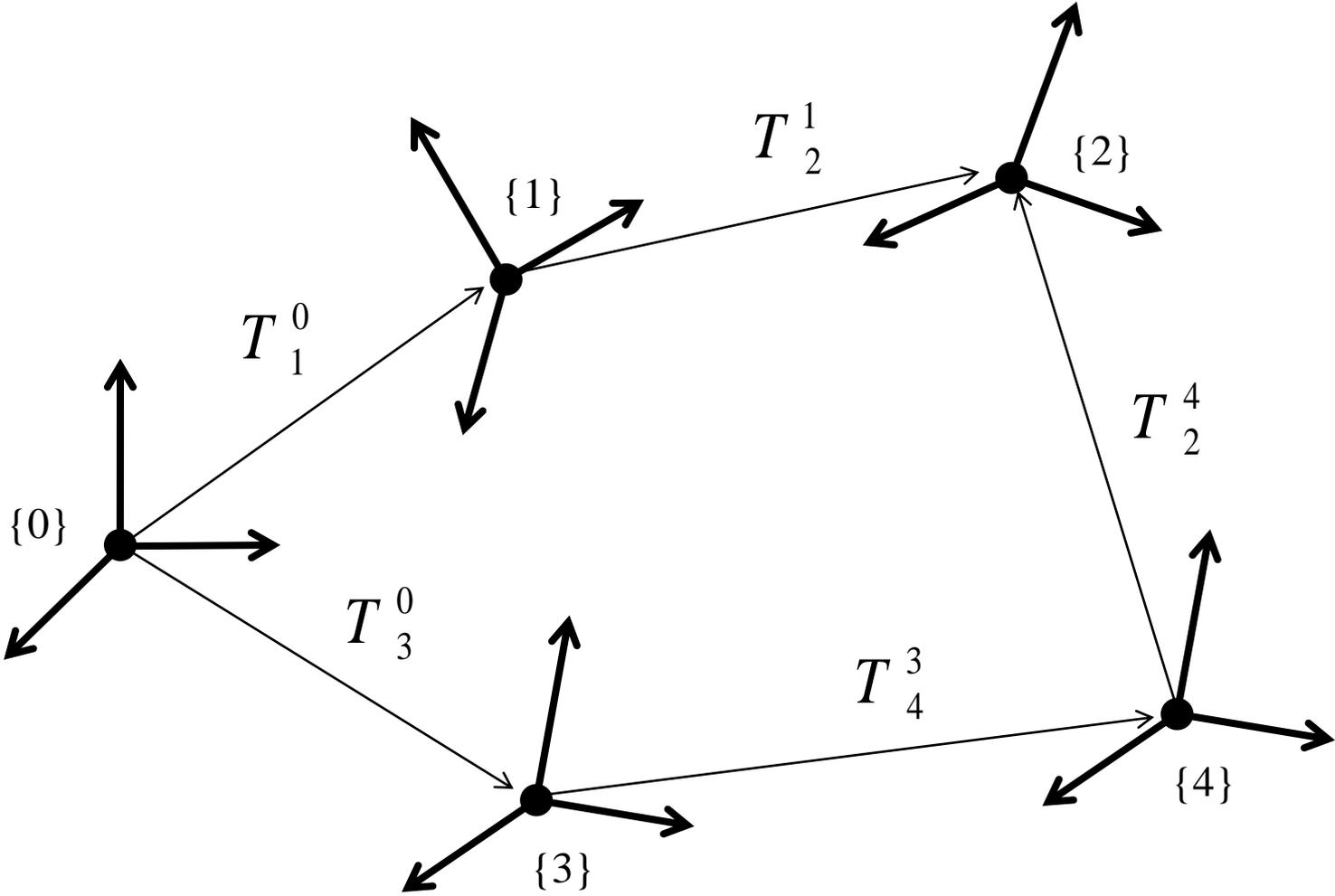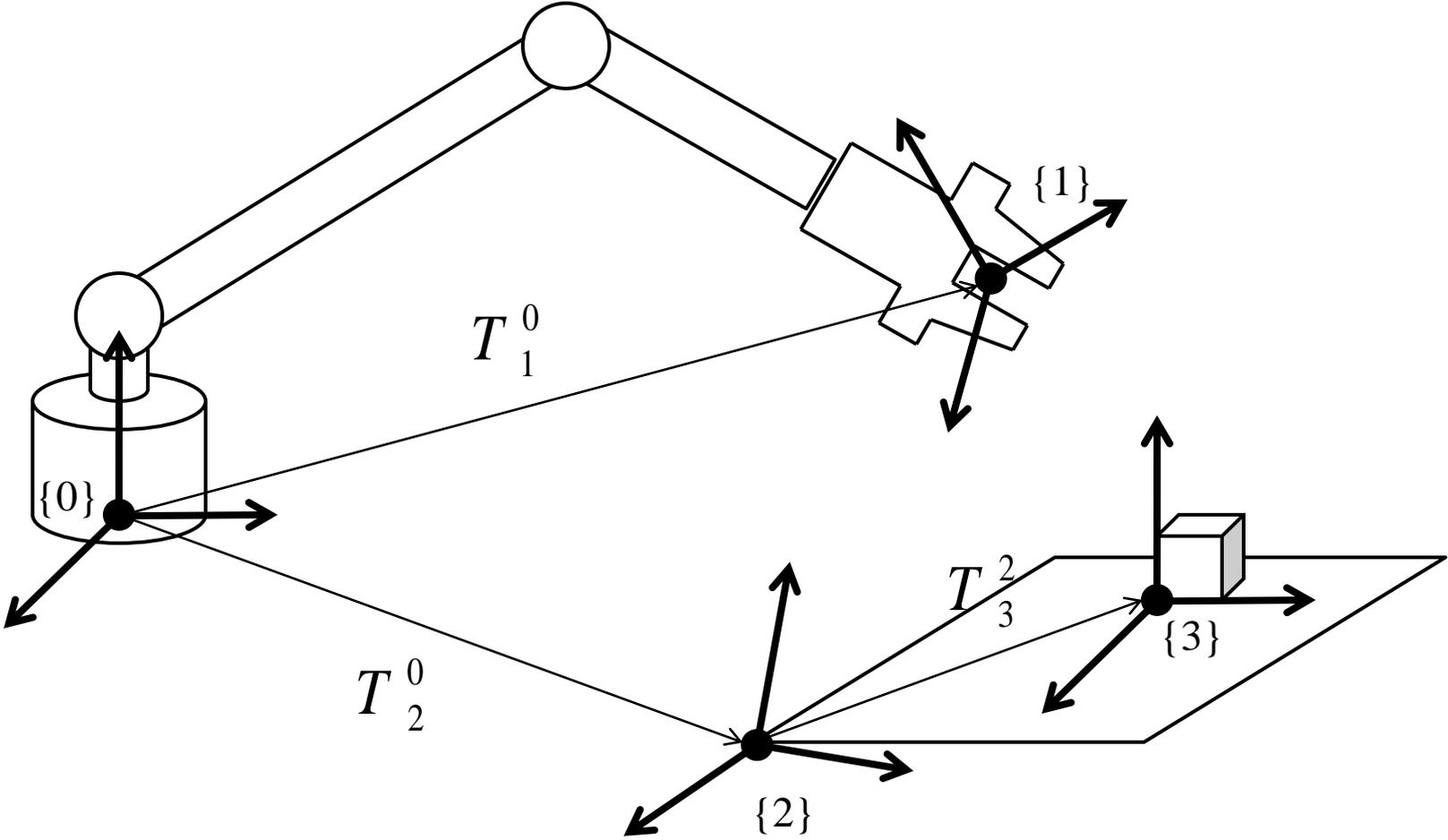
Forward Kinematics

▸ given the joint variables and dimensions of the links what is the position and orientation of the end effector?

Forward Kinematics

Links and Joints

$$q_i = \begin{cases} \theta_i & \text{revolute} \\ d_i & \text{prismatic} \end{cases}$$

▸ n joints, $n + 1$ links

▸ link 0 is fixed (the base)

▸ joint i connects link $i - 1$ to link i

   ▸ link i moves when joint i is actuated

Frames

Forward Kinematics