```matlab
close all
clear all
clc
```

Create Rigid Body Obj.

```matlab
robot =
 robotics.RigidBodyTree('DataFormat','column','MaxNumBodies',3);
%J1
body = robotics.RigidBody('link1');
joint = robotics.Joint('joint1', 'revolute');
setFixedTransform(joint,[0 -pi/2 0 0],'dh');
joint.JointAxis = [0 0 1];
body.Joint = joint;
addBody(robot, body, 'base');
%J2
body = robotics.RigidBody('link2');
joint = robotics.Joint('joint2','revolute');
setFixedTransform(joint,[0 pi/2 0 0],'dh');
joint.JointAxis = [0 0 1];
body.Joint = joint;
addBody(robot, body, 'link1');
%J3
body = robotics.RigidBody('link3');
joint = robotics.Joint('joint3','prismatic');
setFixedTransform(joint,[0 0 0 0],'dh');
joint.JointAxis = [0 0 1];
body.Joint = joint;
addBody(robot, body, 'link2');
%J4
body = robotics.RigidBody('link4');
joint = robotics.Joint('joint4', 'prismatic');
setFixedTransform(joint,trvec2tform([0 0 0]));
setFixedTransform(joint,[0 -pi/2 0 0],'dh');
body.Joint = joint;
addBody(robot, body, 'link3');
%J5
body = robotics.RigidBody('link5');
joint = robotics.Joint('joint5', 'revolute');
setFixedTransform(joint,[0 pi/2 0 0],'dh');
body.Joint = joint;
addBody(robot, body, 'link4');
%J6
body = robotics.RigidBody('link6');
joint = robotics.Joint('joint6', 'revolute');
setFixedTransform(joint,[0 0 0 0],'dh');
body.Joint = joint;
addBody(robot, body, 'link5');

phi_rad=deg2rad(90);
theta_rad=deg2rad(90);
```

```
showdetails(robot)
figure(1)
show(robot,[phi_rad,theta_rad/2,0.17,0.17,theta_rad/2,-phi_rad]')
```

Robot: (6 bodies)

Idx	Body Name	Joint Name	Joint Type	Parent Name(Idx)	Children Name(s)
1	link1	joint1	revolute	base(0)	link2(2)
2	link2	joint2	revolute	link1(1)	link3(3)
3	link3	joint3	prismatic	link2(2)	link4(4)
4	link4	joint4	prismatic	link3(3)	link5(5)
5	link5	joint5	revolute	link4(4)	link6(6)
6	link6	joint6	revolute	link5(5)	

----

ans =

  Axes (Primary) with properties:

              XLim: [-1 1]
              YLim: [-1 1]
           XScale: 'linear'
           YScale: 'linear'
      GridLineStyle: '-'
           Position: [0.1300 0.1100 0.7750 0.8150]
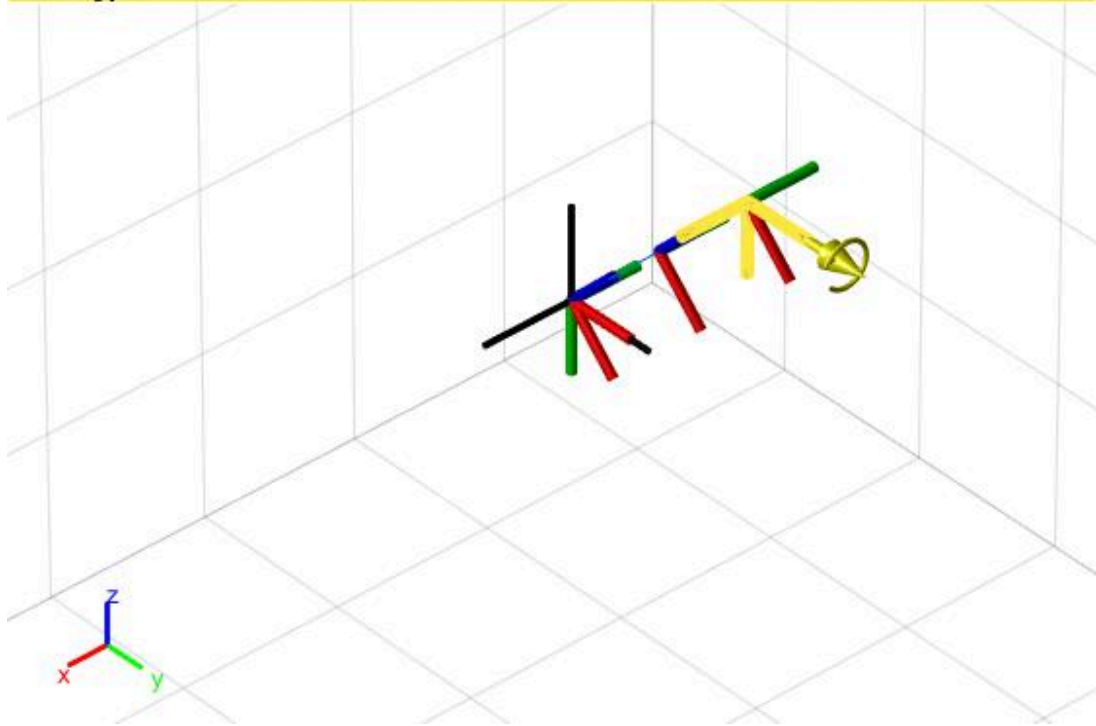   *Units: 'normalized'*

  Use GET to show all properties

Body Name: link6
Body Index: 6
Joint Type: revolute

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