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```
clear; clc;
```

### **Constraints**

```
alpha2 = deg2rad(145.5 - 210);
alpha3 = deg2rad(110.2 - 210);
p21 = -1.236 + 1i*2.138;
p31 = -2.5 + 1i*2.931;
```

#### **Free Choices**

```
beta2 = deg2rad(30);
beta3 = deg2rad(60);
gamma2 = deg2rad(-10);
gamma3 = deg2rad(25);
```

### **Vecter Setup and Solution**

```
A1 = [exp(1i*beta2)-1, exp(1i*alpha2)-1;...
        exp(1i*beta3)-1, exp(1i*alpha3)-1];

A2 = [exp(1i*gamma2)-1, exp(1i*alpha2)-1;...
        exp(1i*gamma3)-1, exp(1i*alpha3)-1];

B = [p21; p31];

WZ = A1\B;
W = WZ(1);
Z = WZ(2);

US = A2\B;
U = US(1);
S = US(2);
```

## **Other Plotting Necesities**

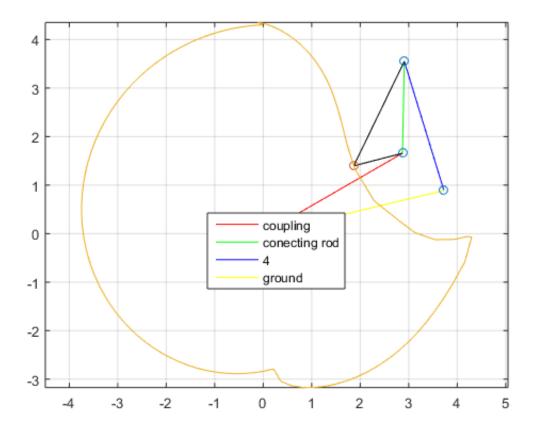
```
V = Z-S;
G = W+V-U;
```

```
ang1 = atan2(imag(G),real(G));
theta = atan2(imag(W),real(W));
%sigma = atan2(imag(U),real(U));
```

# **Display Solution**

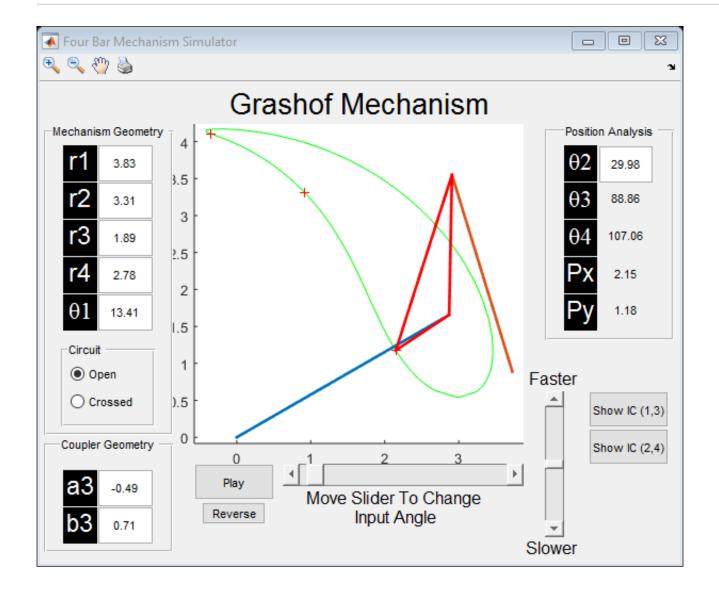
```
disp(['Link 1 has length ' num2str(abs(G))]);
disp(['Link 2 has length ' num2str(abs(W))]);
disp(['Link 3 has length ' num2str(abs(V))]);
disp(['Link 4 has length ' num2str(abs(U))]);
stuff = four_bar_func([rad2deg(ang1) rad2deg(theta) 10 10], [abs(G) abs(W) abs(V) abs(U)], [-.28 1]
, [1 1]);
```

```
Link 1 has length 3.83
Link 2 has length 3.3148
Link 3 has length 1.8938
Link 4 has length 2.7844
```



### **Animate**

```
pp = [W+Z; W+Z+p21; W+Z+p31];
Four_Bar([W Z U S],pp,'play');
```



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