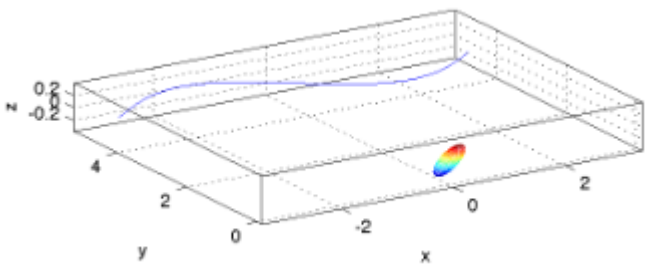
DINAMICA ROBOT PUMA 560 (toolbox PETER CORKE)

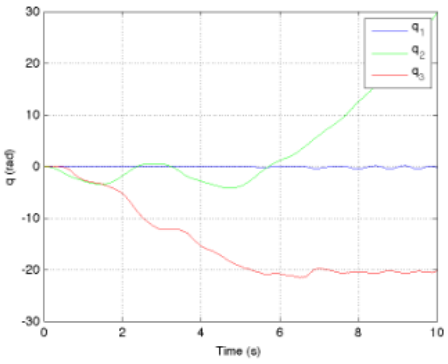
```
>> mdl_puma560
>> Q = p560.rne(qn, qz, qz)
>> Q = p560.rne(qn, qz, qz, [0 0 0]')
>> q = jtraj(qz, qr, 10)
>> Q = p560.rne(q, 0*q, 0*q)
>> about(Q)
>> Q(5,:)
>> p560.rne(qn, [1 0 0 0 0 0], qz, [0 0 0]')
>> p560.links(1).dyn
>> gravload = p560.gravload(qn)
>> p560.gravity'
>> p560.gravity = p560.gravity/6;
>> p560.gravload(qn)
>> p560.base = trotx(pi);
>> p560.gravload(qn)
>> mdl_puma560
>> Q = p560.gravload(qs)
>> Q = p560.gravload(qr)
>> M = p560.inertia(qn)
>> max(M11(:)) / min(M11(:))
>> qd = 0.5*[1 1 1 1 1 1];
>> C = p560.coriolis(qn, qd)
>> C*qd'
>> p560.payload(2.5, [0, 0, 0.1]);
>> M_loaded = p560.inertia(qn);
>> M_loaded ./ M;
>> p560.gravload(qn) ./ gravload
>> [Q,g] = p560.rne(qn, qz, qz);
>> g'
>> sum([p560.links.m])
>> J = p560.jacob0(qn);
>> M = p560.inertia(qn);
>> Mx = (J * inv(M) * inv(M)' * J');
>> Mx = Mx(1:3, 1:3);

>> plot_ellipse( Mx )
```



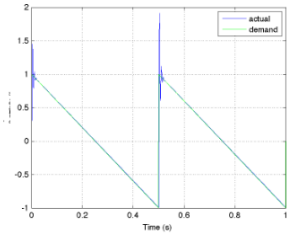
```
>> sqrt(eig(Mx))
>> min(ans)/max(ans)
>> p560.maniplty(qn, 'asada')
>> p560.links(2).dyn


>>
sl_ztorque
```

FIGURA 9

```
>  r = sim('sl_ztorque');
>> t = r.find('tout');
>> q = r.find('yout');
>> p560.plot(q)


>> plot(t, q(:,1:3)); ylabel('q (rad)'); xt;
```



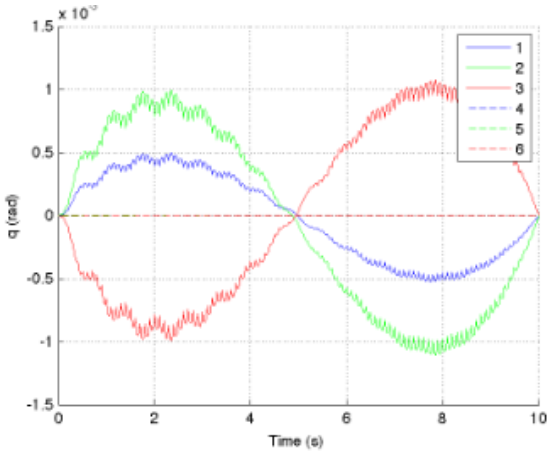

```
>> p560_nf = p560.nofriction();
>> p560_nf = p560.nofriction('all');


>> vloop_test


>>
sim('vloop_test');
```




```
>> ploop_test
```

```
>>
mdl_puma560
>>
sl_fforward
>>
>>
mdl_puma560
sl_ctorque
```

```
>> r = sim('sl_ctorque');
>> t = r.find('tout');
>> q = r.find('yout');
```




```
>>
>>
mdl_twolink
sl_flex
```

```
>>
r = sim('sl_flex')
```