

```
function [q1, q1p,q1pp,q2,q2p,q2pp,q3,q3p,q3pp,Fq1,Fq2,Fq3] = traj_gen(t,dT_target, ...  
                                Q_interp,Qp_interp,Qpp_interp,Fq_interp)
```

```
val=find(dT_target<=t);  
indice=val(end);
```

```
q1 = Q_interp(indice,1);  
q2 = Q_interp(indice,2);  
q3 = Q_interp(indice,3);  
q1p = Qp_interp(indice,1);  
q2p = Qp_interp(indice,2);  
q3p = Qp_interp(indice,3);  
q1pp = Qpp_interp(indice,1);  
q2pp = Qpp_interp(indice,2);  
q3pp = Qpp_interp(indice,3);
```

```
Fq1 = 0;  
Fq2 = 0;  
Fq3 = 0;
```

```
end
```