

Example of moveConstrained task definition

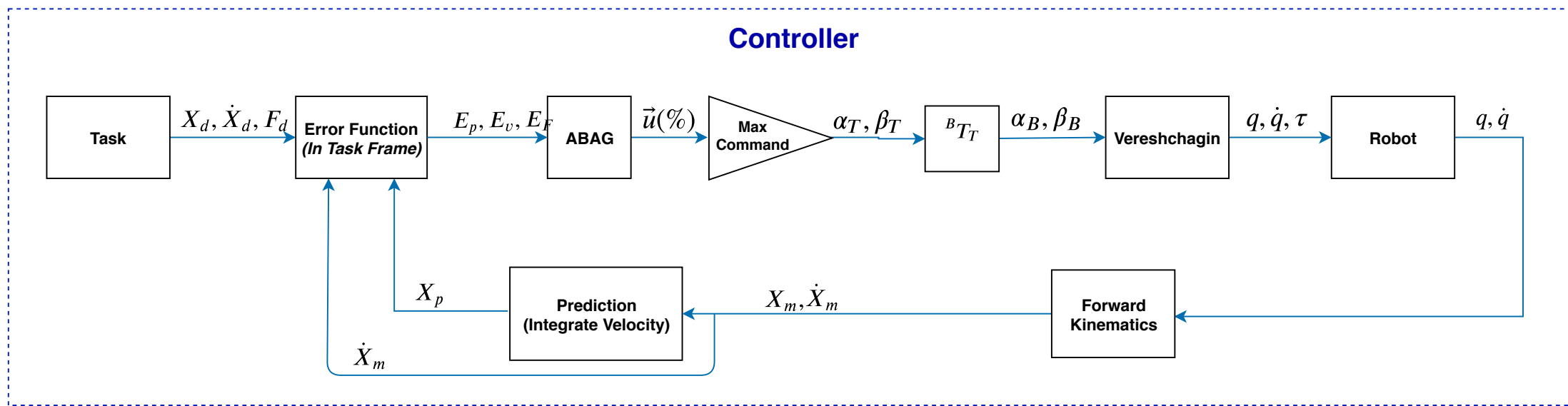
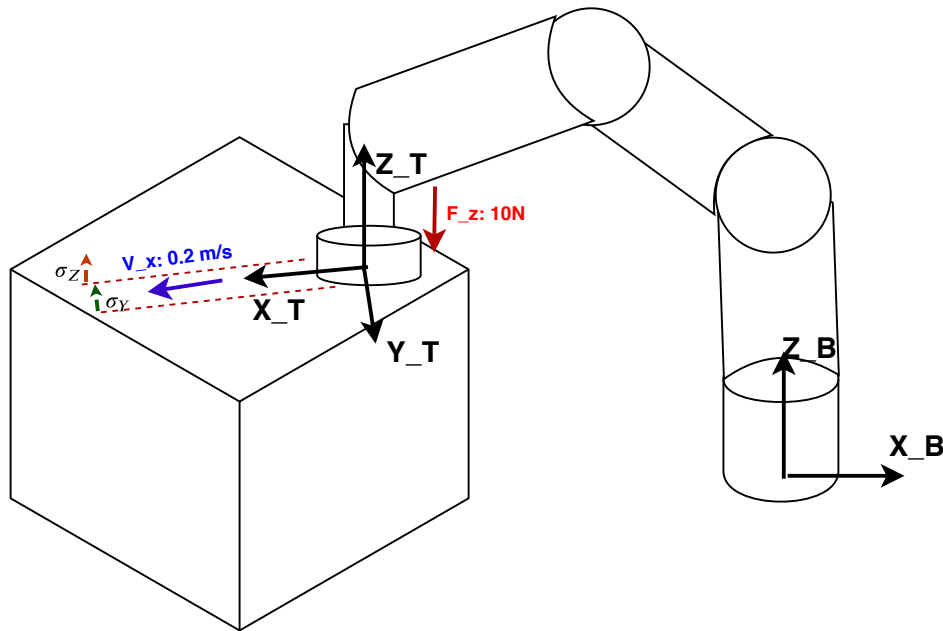
move compliantly { // with task frame directions

- * X_T: velocity motion profile (tube 0.01 m/s)
- * Y_T: position tube 0.03 m
- * Z_T: force profile (tube 0.5 N), position tube 0.03m
- * aX_T: force 0 N, tube 0.1 N
- * aY_T: force 0 N, tube 0.1 N
- * aZ_T: no specs / orientation tube 10 deg

**Objective
(Error) function**

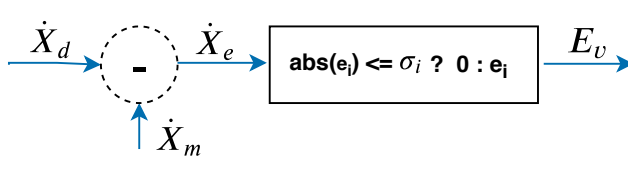
- } until: * distance in X > d m
* F_x/F_y > 0.5 N
* time > 20 sec

**Monitors
(FSM)**

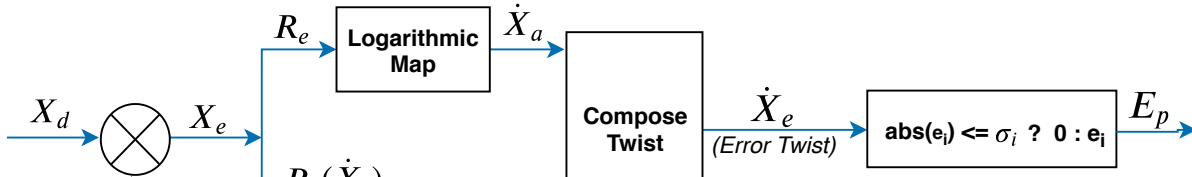


Error Function (In Task Frame)

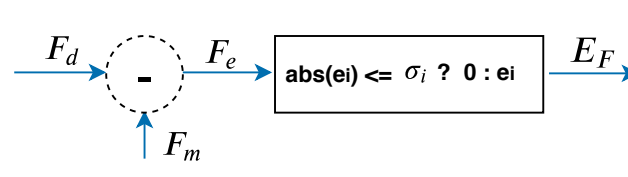
Current Speed Error



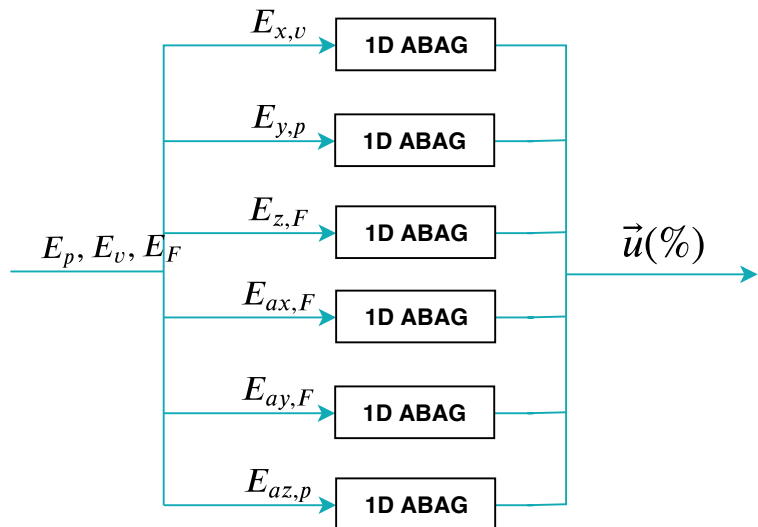
Predicted Pose Error



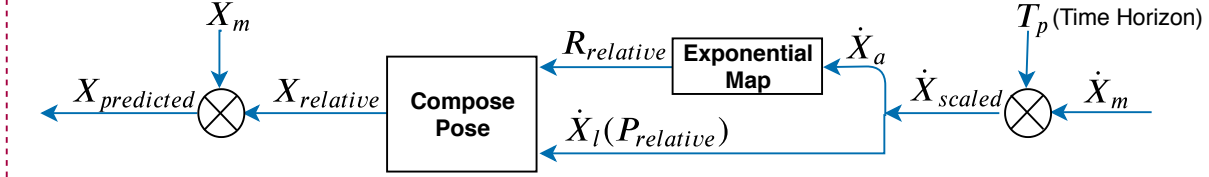
Current Force Error



ABAG



Prediction (Integrate Velocity)



Example of moveConstrained task definition

move compliantly { // with task frame directions

- * X_T: velocity motion profile (path, time to complete), tube 0.01 m/s
- * Y_T: position tube 0.03 m
- * Z_T: force profile, tube 0.5 N
- * aX_T: force 0 N, tube 0.1 N
- * aY_T: force 0 N, tube 0.1 N
- * aZ_T: no specs / orientation tube 10 deg

**Objective
(Error) function**

- } until: * distance in X > d m
* F_x/F_y > 0.5 N
* time > 20 sec

**Monitors
(FSM)**

FSM For moveConstrained force and path following task

