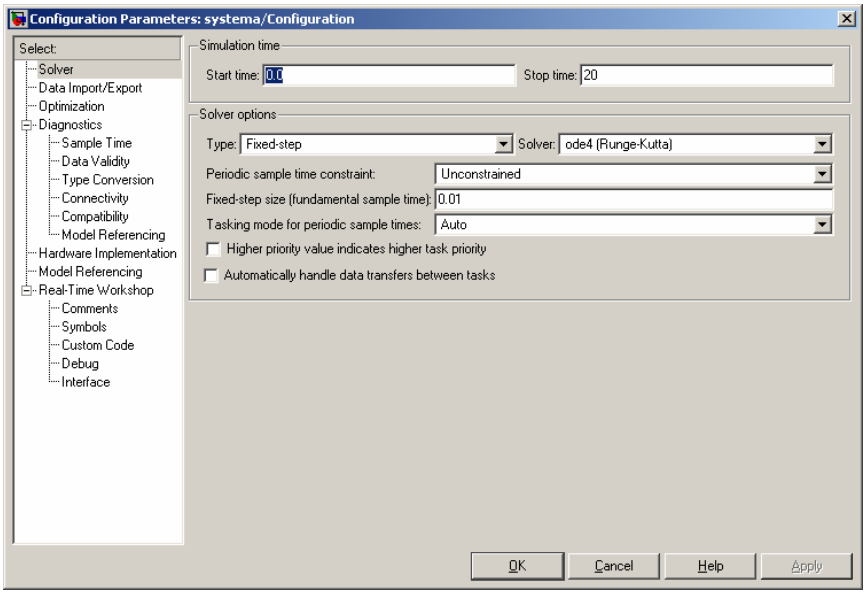
OS4 Quadrotor simulator V1.1 – (19-01-2006)

Getting started:
- Open simulink model: **systema.mdl**
- If you want, you can modify the initial conditions or the setpoints
- Double click on **optsiminit**
- Run the simulation (verify configuration parameters in simulink: Fixed-step, ode4, 0.01 sec)
- Run **traj.m** to see your fantastic control
- Type **os4** in Matlab command line to run the analysis interface

Notes/Remarks
- This model was built on Matlab 7.1 (R14)
- There are some controllers included for getting started!
- Right hand rule is applied
- Reference system is as shown below (MTx sensor from Xsens):

- Z data is provided at 20Hz only (as on the SFR10 sensor from Devantech)
- Angles data are provided at 100Hz max
- Angular rates are provided at 100Hz
- Simulation is done at 100Hz by default
- Max propellers rotation speed is 260 rad/sec
- The added noise and delay are reasonably close to the reality
- The Low Pass filter is by default disabled. It is very hard to control having it enabled



Enjoy,
Your comments are welcome to: samir.bouabdallah@epfl.ch