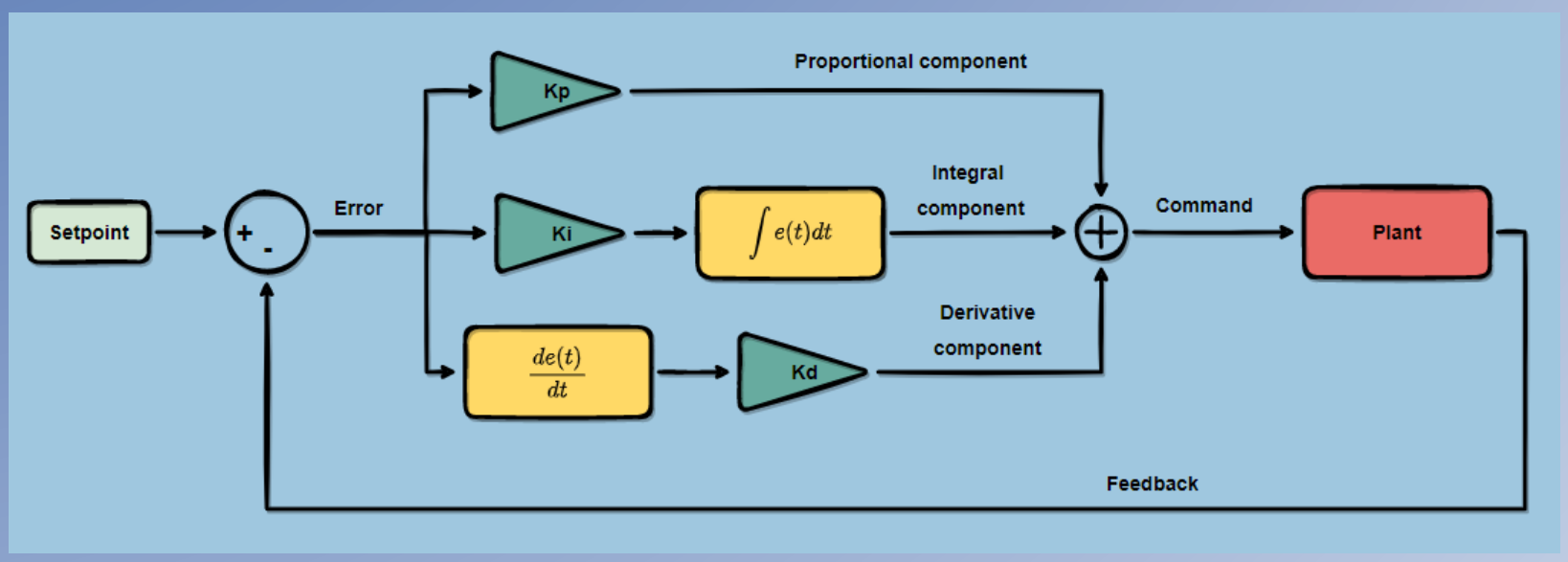
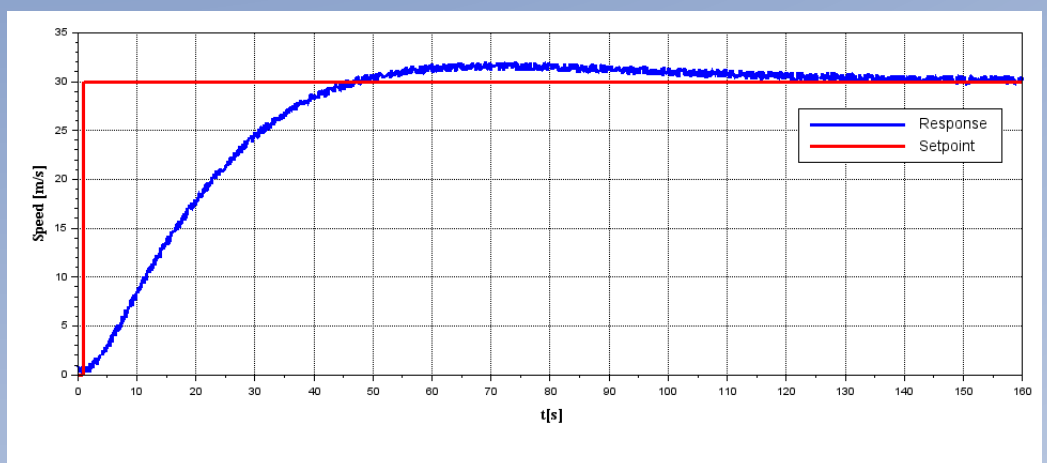
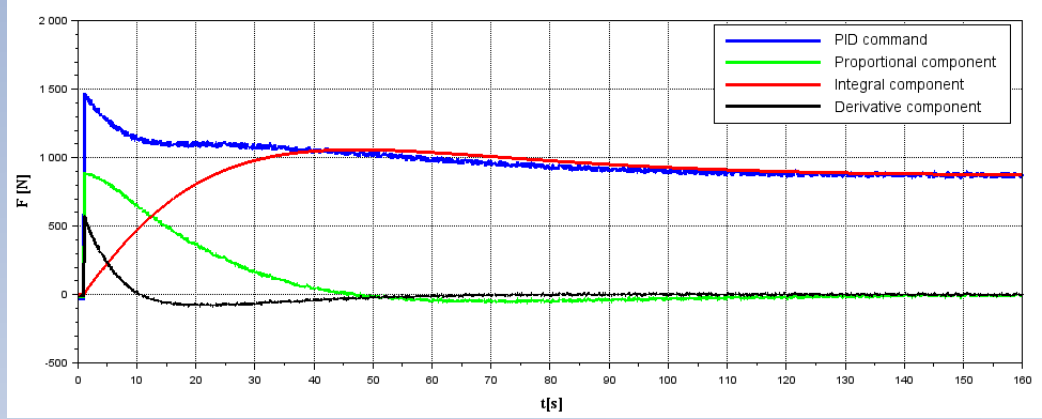
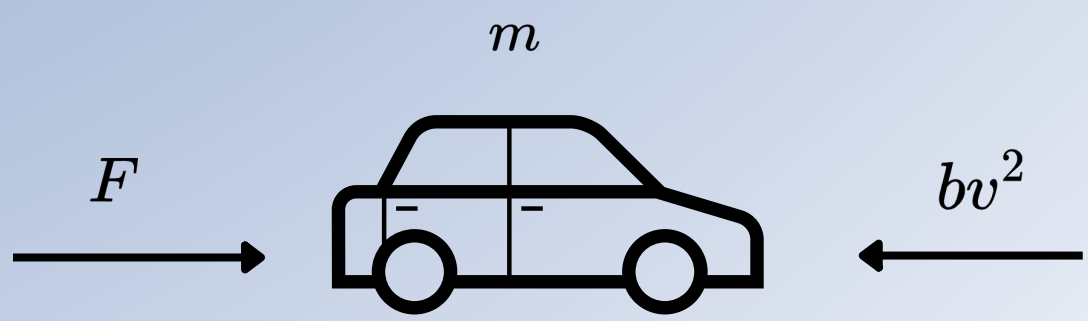
PID Component Analysis









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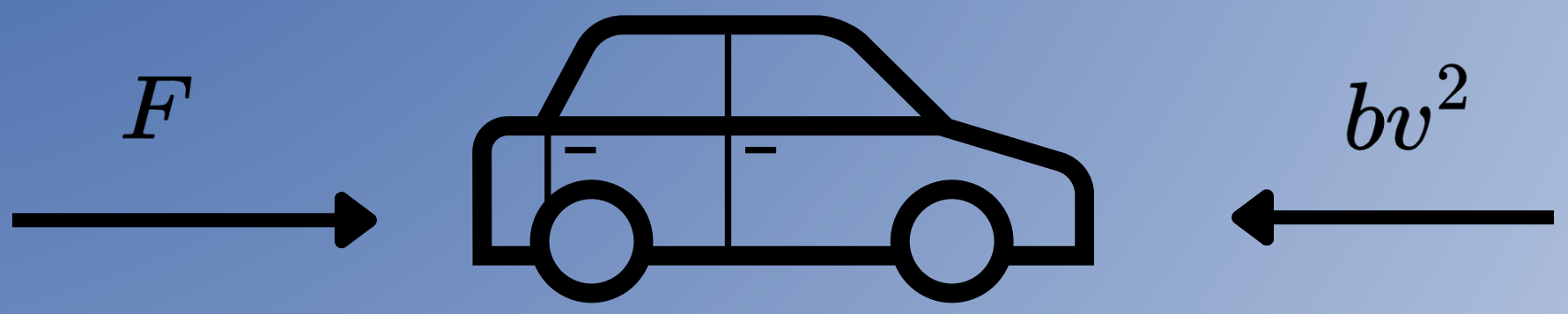
Code
https://github.com/simorxb/PID-Components

Plant



The plant used in this example is the model of a car of mass m, pushed by a force F and subject to aerodynamic drag $-bv^2$.

The dynamic equation is:

$$m\frac{dv}{dt} = F - bv^2$$

The parameters used are:

$$m = 1000kg$$
$$b = 1\frac{Ns^2}{m^2}$$

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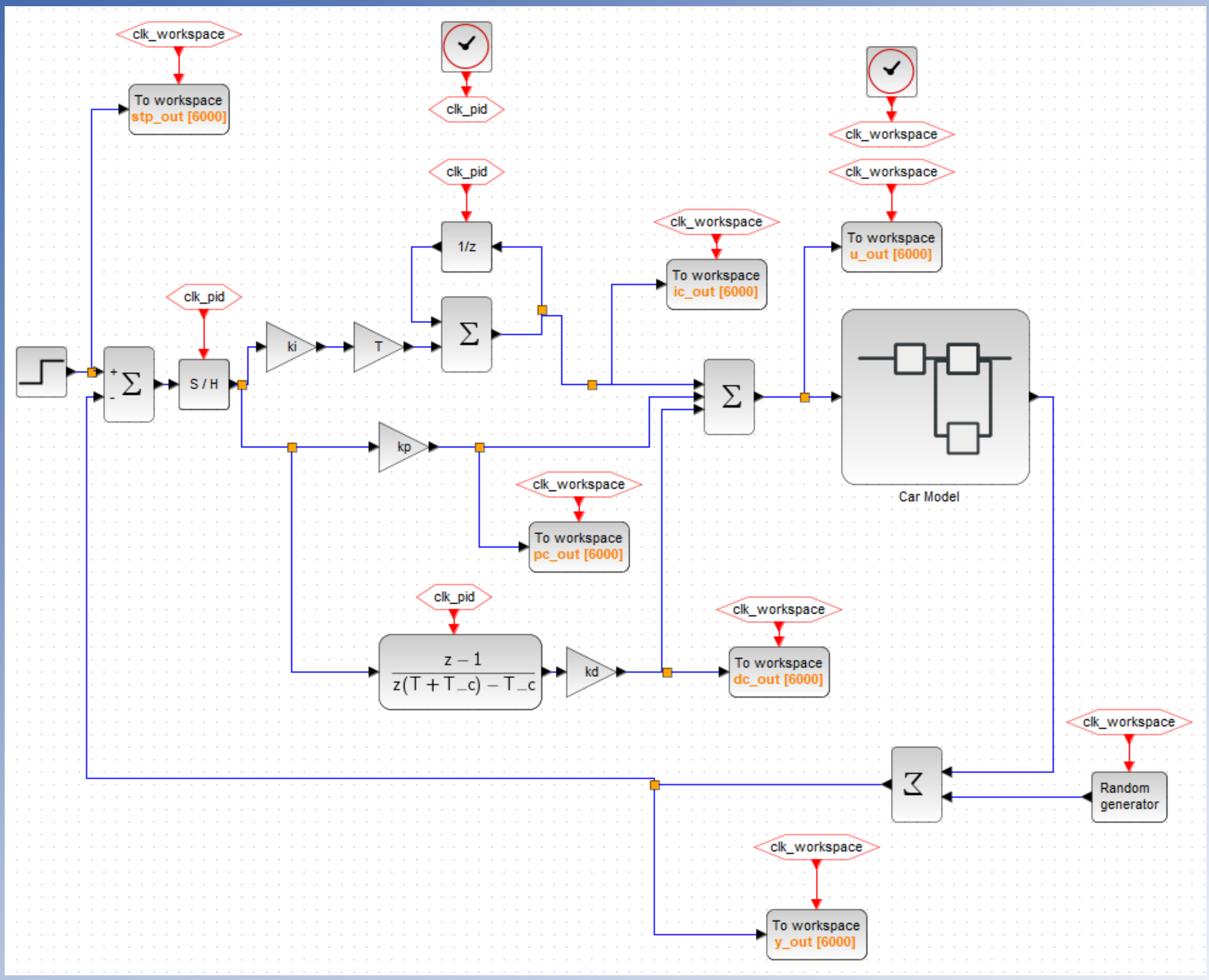
Top Level – Xcos



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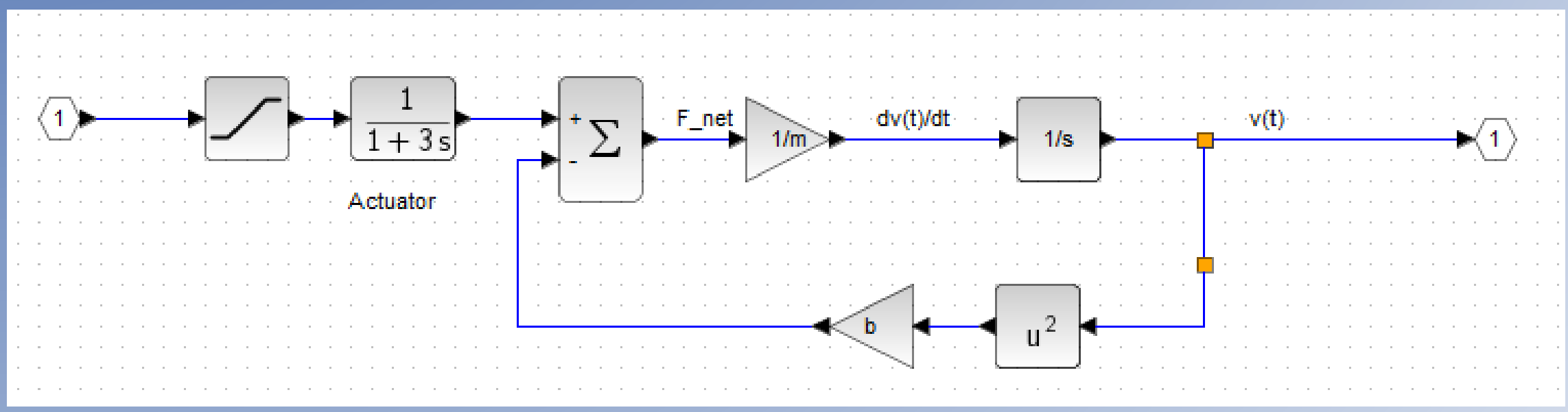
Car Model – Xcos



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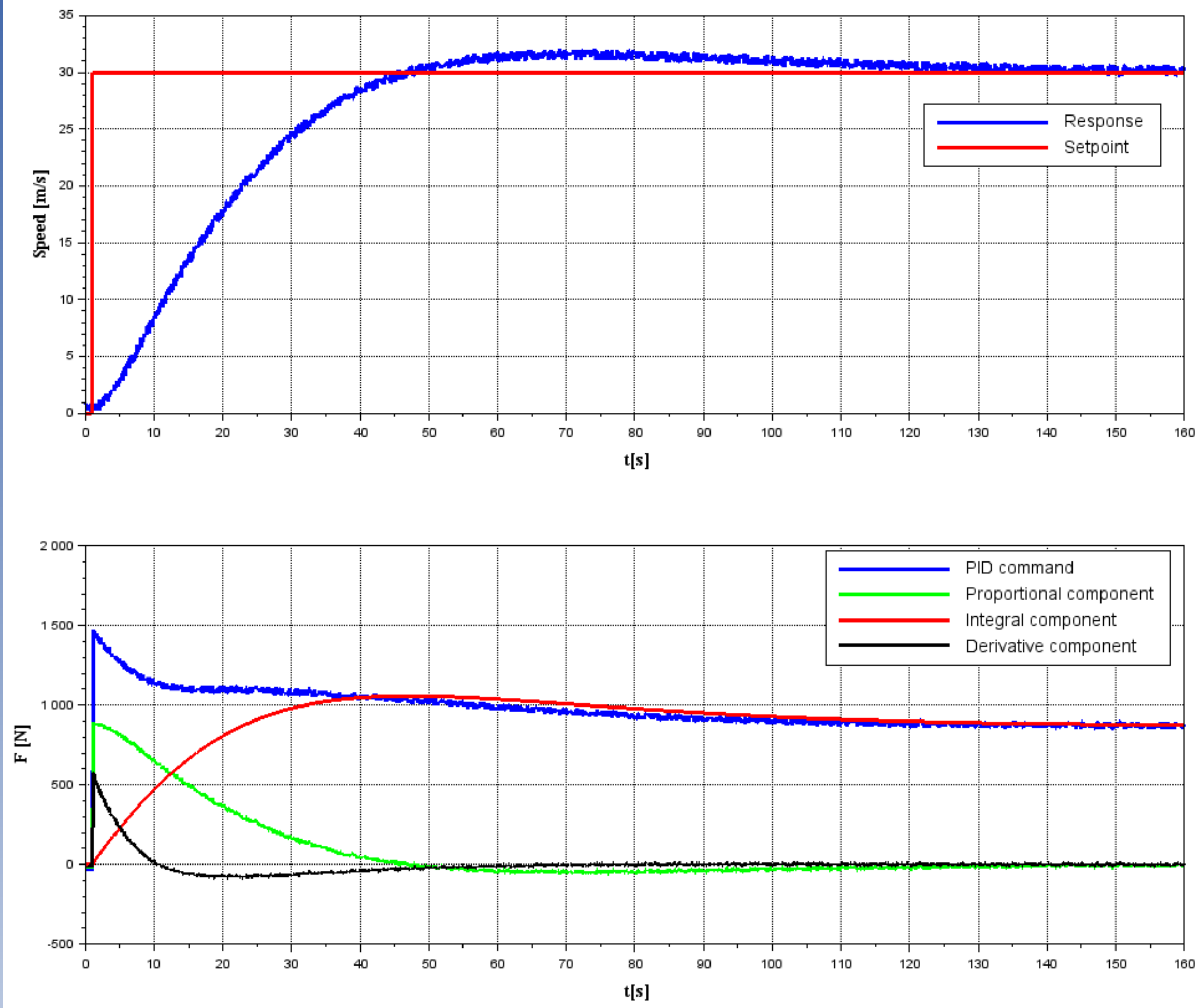
Simulation



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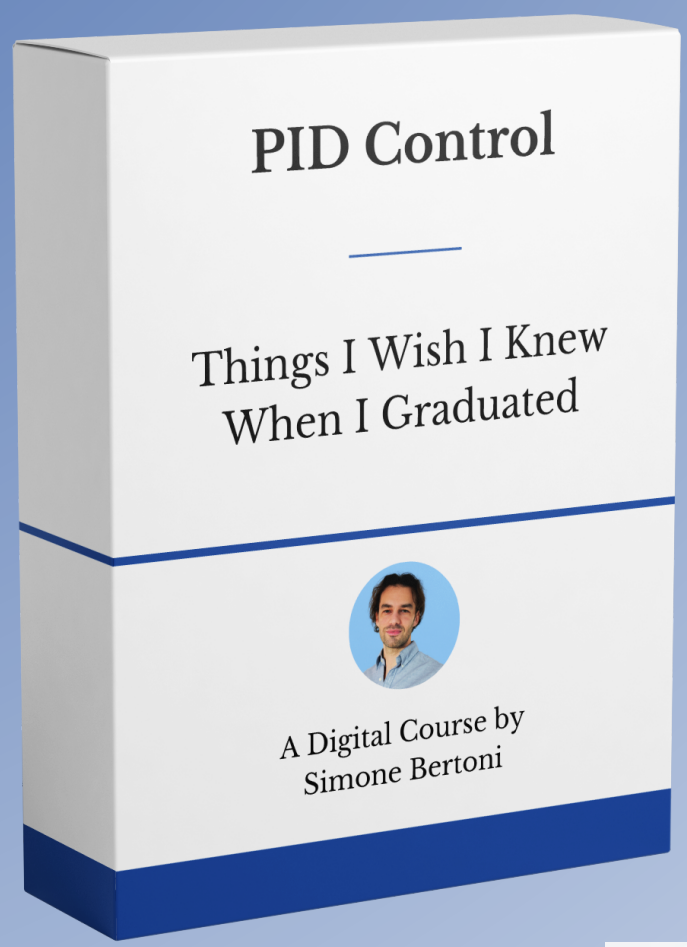
PID Control

Interested in PID Control? Check out my digital course:

https://simonebertoni.thinkific.com/

★★★★★
Very helpful and practical

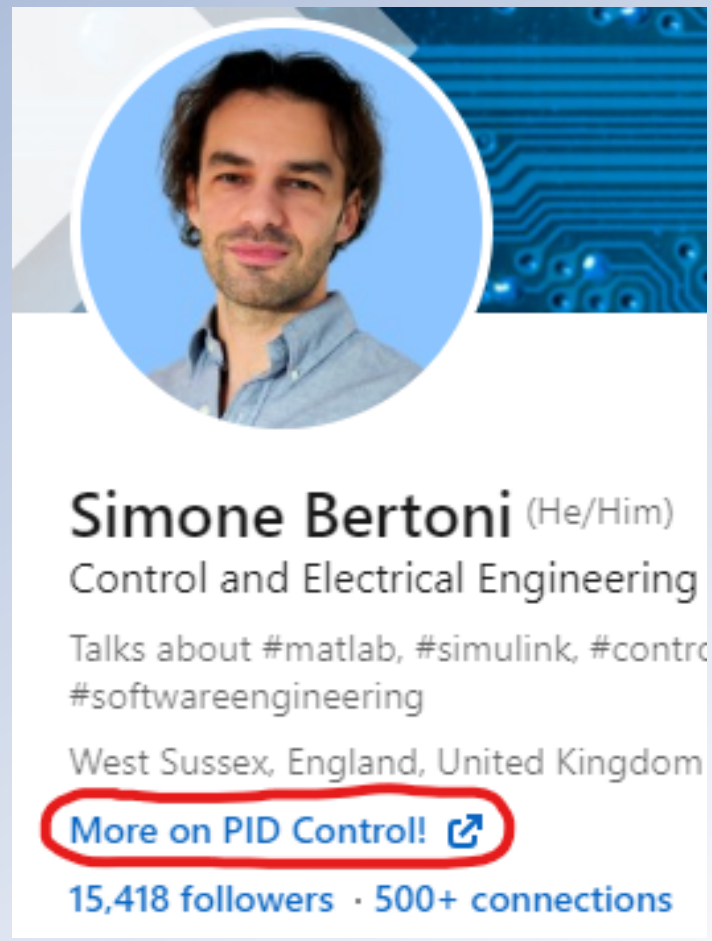
★★★★★
Very good sharing of experience



★★★★★
A different way to learn PID !

★★★★★
Great course

Find the link here!



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