Supplementary Reading: Proportional-Integral-Derivative (PID) Control

The previous lecture on Proportional-Integral-Derivative (PID) Controls uses Laplace transforms. If you need to review Laplace transforms, check out these videos on Coursera:

- DifferentialEq: Laplace (Georgia Tech)

- Laplace transform. Calculation of an expectation of a counting process 1 (Higher School of Economics)

- Laplace transform. Calculation of an expectation of a counting process 2 (Higher School of Economics)

- Laplace transform. Calculation of an expectation of a counting process 3 (Higher School of Economics)

- Classical control: Textbook by Prof. Bruce Francis (University of Toronto), covers Laplace Transforms, Bode Diagrams, Nyquist Plots


Supplementary Reading: Longitudinal Speed Control with PID

For a deeper dive into longitudinal control, read Chapter 5 (pp. 123-150) in the textbook below:

R. Rajamani, "Introduction to Longitudinal Control " In: *Vehicle Dynamics and Control*, Mechanical Engineering Series, https://link.springer.com/chapter/10.1007%2F0-387-28823-6_5 (2006).


Supplementary Reading: Feedforward Speed Control

To learn more about the feedforward speed control, read the PDF below:

Sailan, K., Kuhnert, K.D., "Modeling and Design of Cruise Control System with Feedforward For All Terrain Vehicles", Computer Science & Information Technology (CS & IT).
2013. https://airccj.org/csecfp/library/Search.php?title=MODELING+AND+DESIGN+OF+CRUISE+CONTROL+SYSTEM.