One Model with a Wealth of Options – versatile analyzing methods of Modelica models in SimulationX

The aim of the tutorial is to show the various analyzing methods in SimulationX with the help of one simple Modelica model.

Proceeding:

1. Explanation of the general concept of SimulationX (GUI; handling of *.mo-files, results and parameters) while designing a simple driveline model

2. Transient simulation including FFT analysis of selected results

3. Linear system analysis: calculation of natural frequencies and mode shapes with MSL elements

4. Extension of MSL elements for observation of energy distribution and deviation within LSA

5. Steady-state simulation

6. Coupling of elements from the MSL with those from ITI libraries