## **Powertrain NVH post processing**

A. Sarridis

Powertrain analysts can benefit from the effective solutions in META to evaluate vibration results coming from operational engine loads, the area contribution to the radiated noise and the radiated exterior acoustic field in order to assess the current design and to elaborate further design improvements. In particular operational loads and their responses as vibrations and sound pressure levels can be plotted as Campbell diagrams and in 2.5D plots. Moreover, orders can be extracted and displayed separately with the order tracking option as well as exporting them as load tables in Nastran format. Pressure distribution in polar coordinates along with a user defined meridian is provided with the Directivity plot. ERP can be directly plotted from Nastran results or calculated in META based on the modal basis of the structure. Further on 3D results are supported from various exterior acoustic solvers in frequency and time domain.