

# Thesis subject

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The application context is the global design process for the next generation of electrified powertrains. It involves the development of advanced vibro-acoustic metamodels, typically using probabilistic, Bayesian inference, and other AI-related modeling tools. The function of meta-models is to infer a probabilistic NVH performance from a set of known design parameters, which are mostly geometrical and related to the dynamic structural properties. The end-user target is a knowledge model able to guide the early-stage engineering decision/optimization processes on a rational, scientific and objective basis.