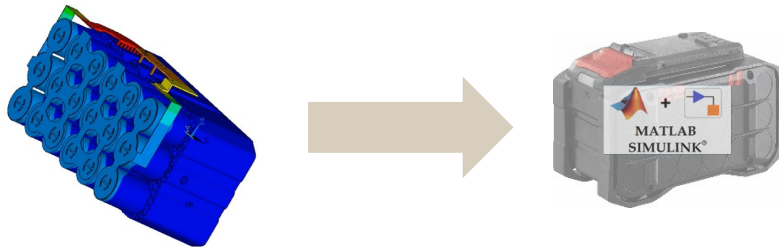# REDUCED ORDER BATTERY PACK MODELLING

Problem Description

- Reduced Order Models (ROM) are of extreme importance to:
  - Evaluate design concepts
  - Support control design (CMS)
  - Perform system simulations.

- Automatic generation of ROM eases the process for evaluating different pack concepts.

Objectives & Tasks

- FEM Battery pack model preparation in Ansys.

- Evaluate different system identification techniques to aid ROM generation.

- Model validation with experimental measurements.

- Model import to Matlab/Simulink

- Measurement test planning and execution.

- Software skills: Ansys Workbench (Mechanical), Matlab Simulink

- Technical Skills: System identification, Control systems