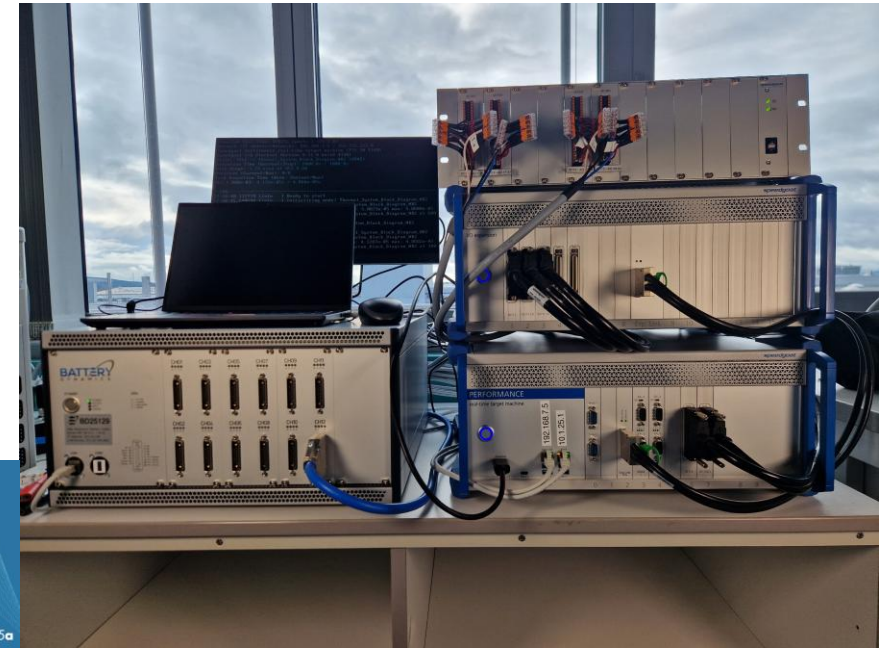


Implementation of a virtual parallel connection

In real applications, battery cells are often connected in parallel to increase capacity. Parallel connections are prone to inhomogeneities (e.g. uneven current distribution or aging). We use a testbench that emulates a virtual cell connection to study these effects.

The aim of this research module is to implement and validate on real cells the proposed parallel connection using state-of-the-art hardware. Throughout the module, you will have the opportunity to:

- Deepen your understanding of hardware communication protocols
- Enhance your proficiency in MATLAB/Simulink for system modeling and control
- Gain hands-on experience with specialized software tools used in battery testing and evaluation



Qualifications:

- Advanced programming knowledge, preferably in Matlab/Simulink
- Basic knowledge of Control Engineering
- Independent and careful way of working

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