



Electric driveline research status in Uppsala University

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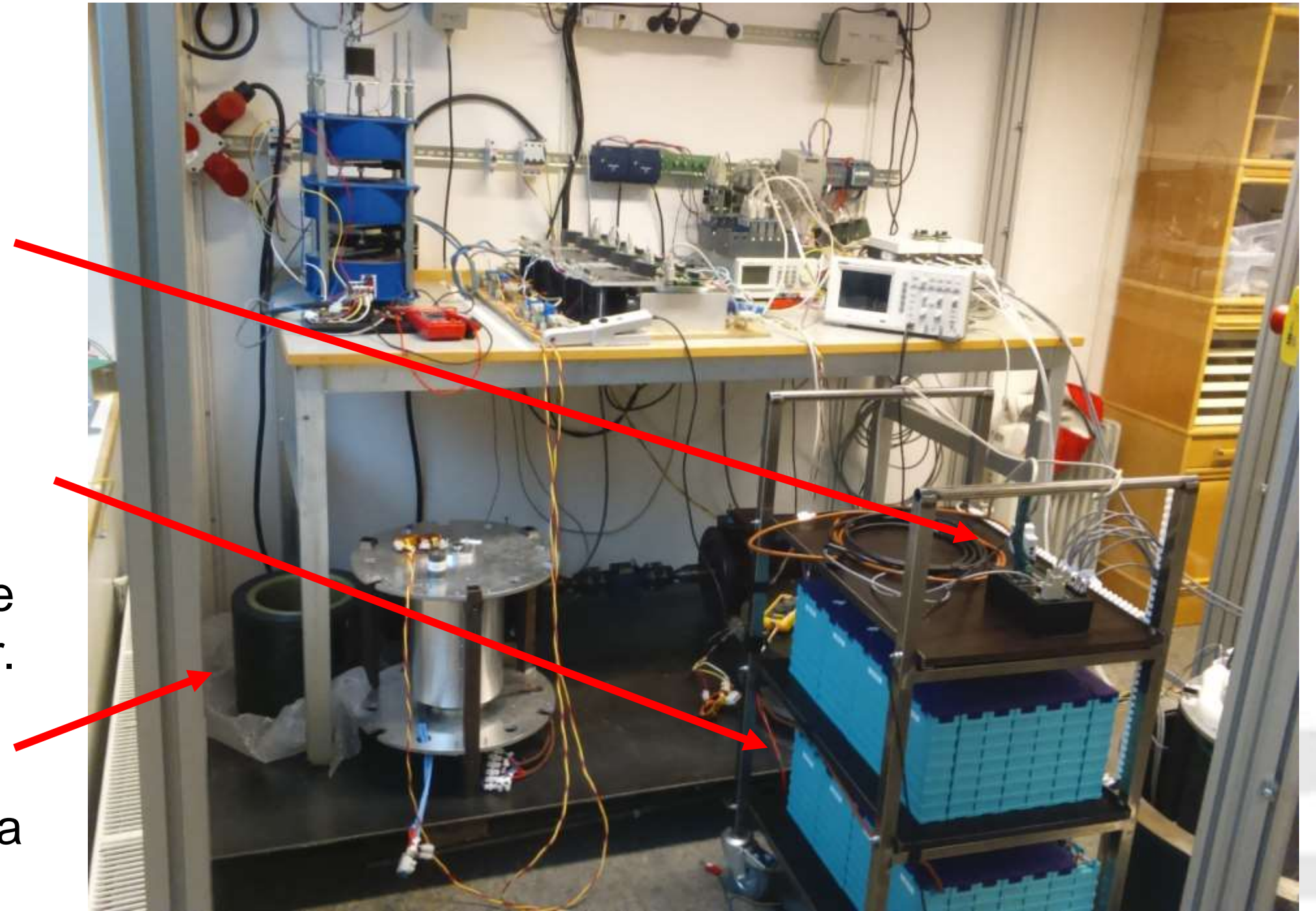
Recent test driveline improvements

The test setup is under constant development. The latest improvements since our last meeting includes

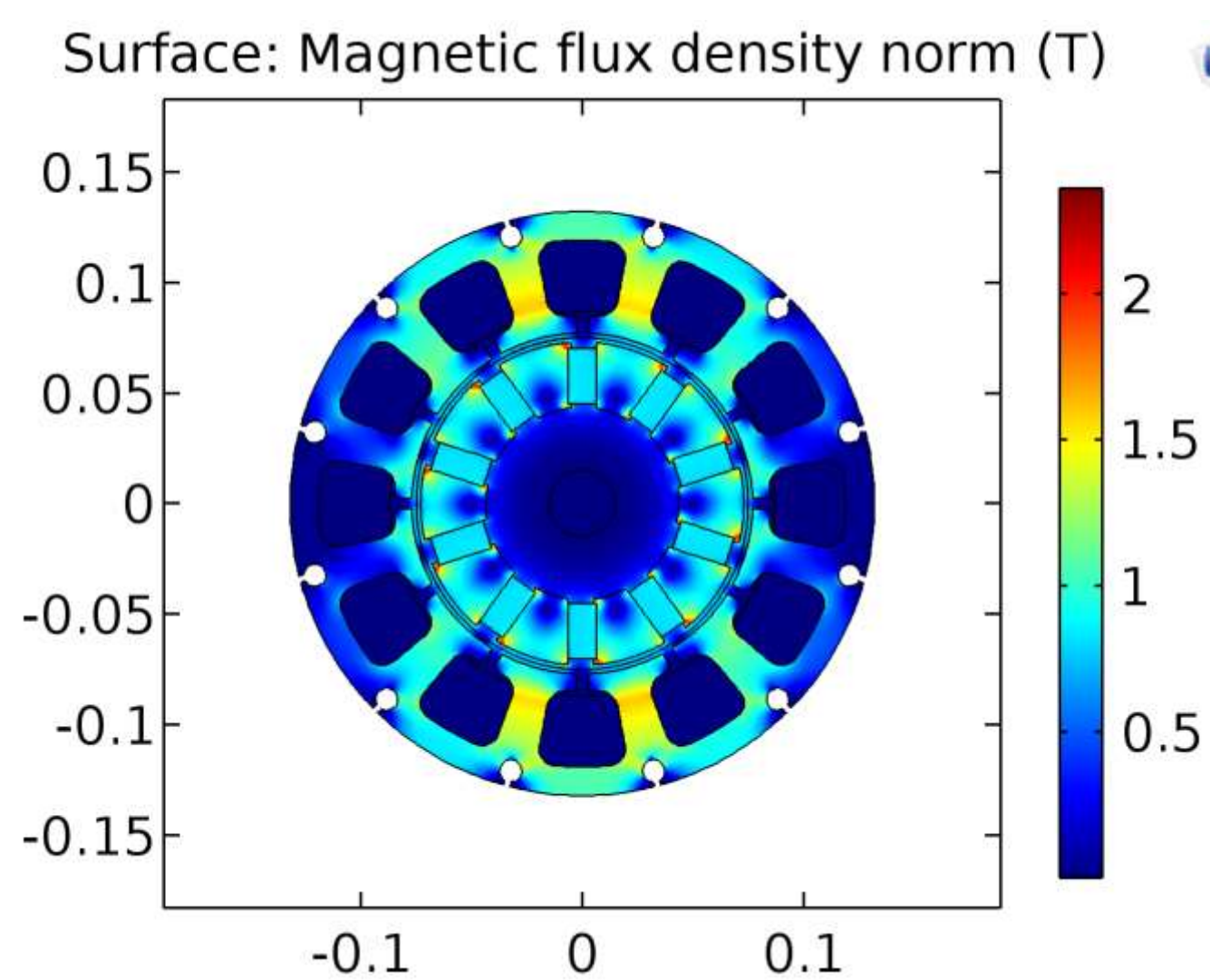
Battery Management System (BMS):
Self developed for battery charging and system protection.

Battery pack:
The battery pack was the last component missing for complete hardware in the loop testing. Previously, the driveline was connected to the grid through a rectifier.

Carbon fiber shell:
We designed a shell to increase the moment of inertia of the reluctance flywheel.

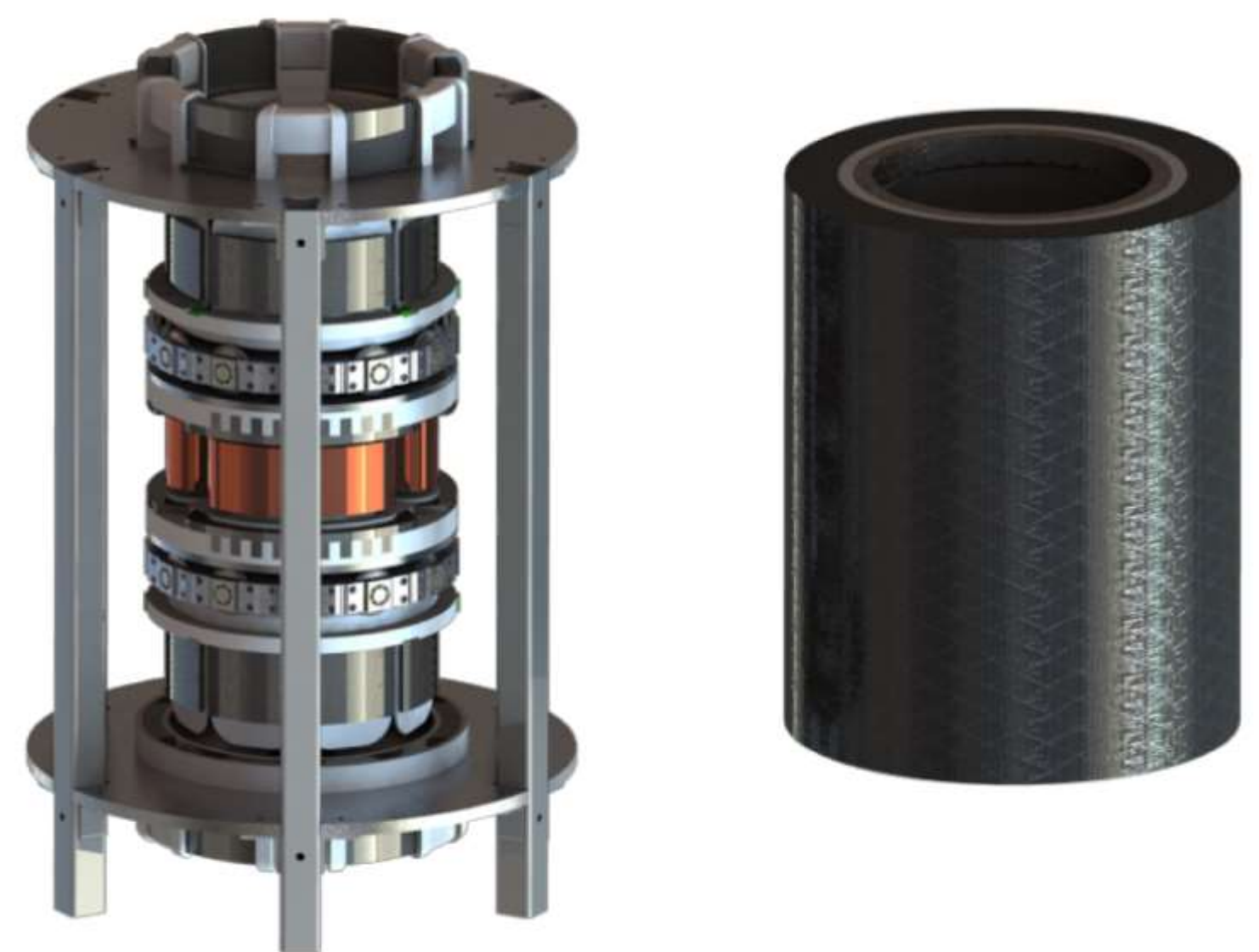


PM motor design



Magnetic field distribution in the IPM motor for an electric car that we are building and will be tested in Spring 2016.

Next generation flywheel



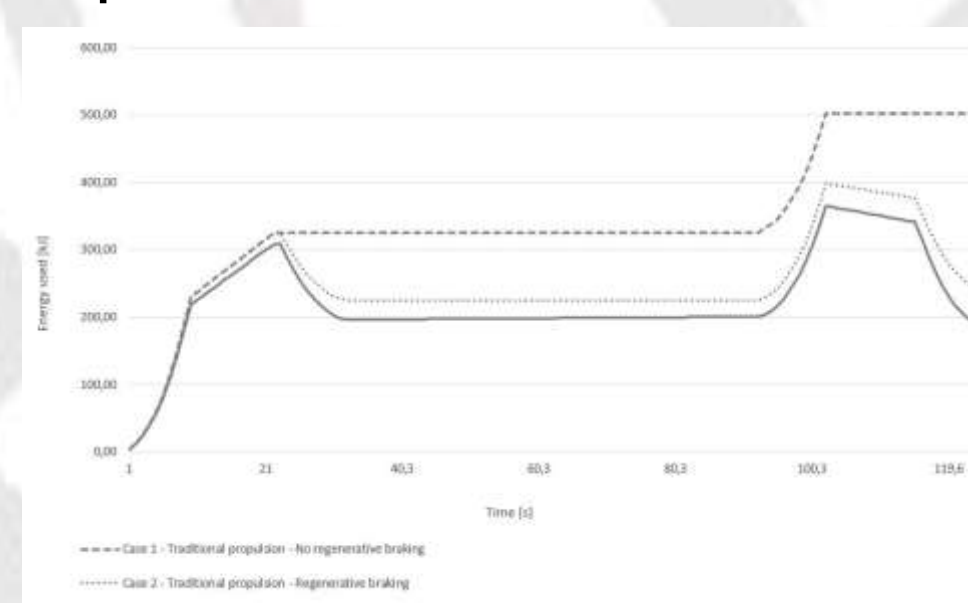
Electric motor/generator, magnetic bearings and carbon fiber flywheel integrated in a compact design.

Superconductive magnetic bearings

We have a common project together with Federal University of Rio de Janeiro (UFRJ) and Fluminense Federal University (UFF). We tested superconductive magnetic bearings.



Our colleges at UFRJ have designed and constructed a 200 m long MAGnetic LEVitation (Maglev). It is under operation in the UFRJ campus in Rio de Janeiro.



UU collaborated with the energy requirements and drive cycles simulations.