

Final Event  
24-25<sup>th</sup> of May 2022

Physical Demos

## e-drive HIL Testing

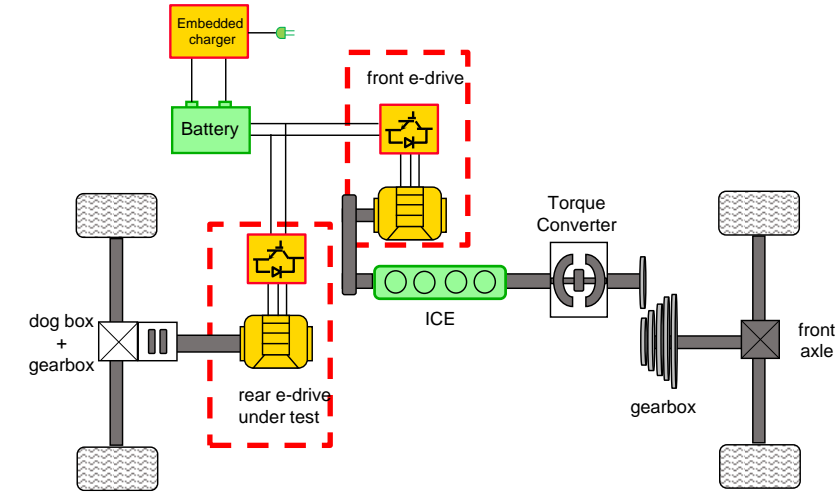
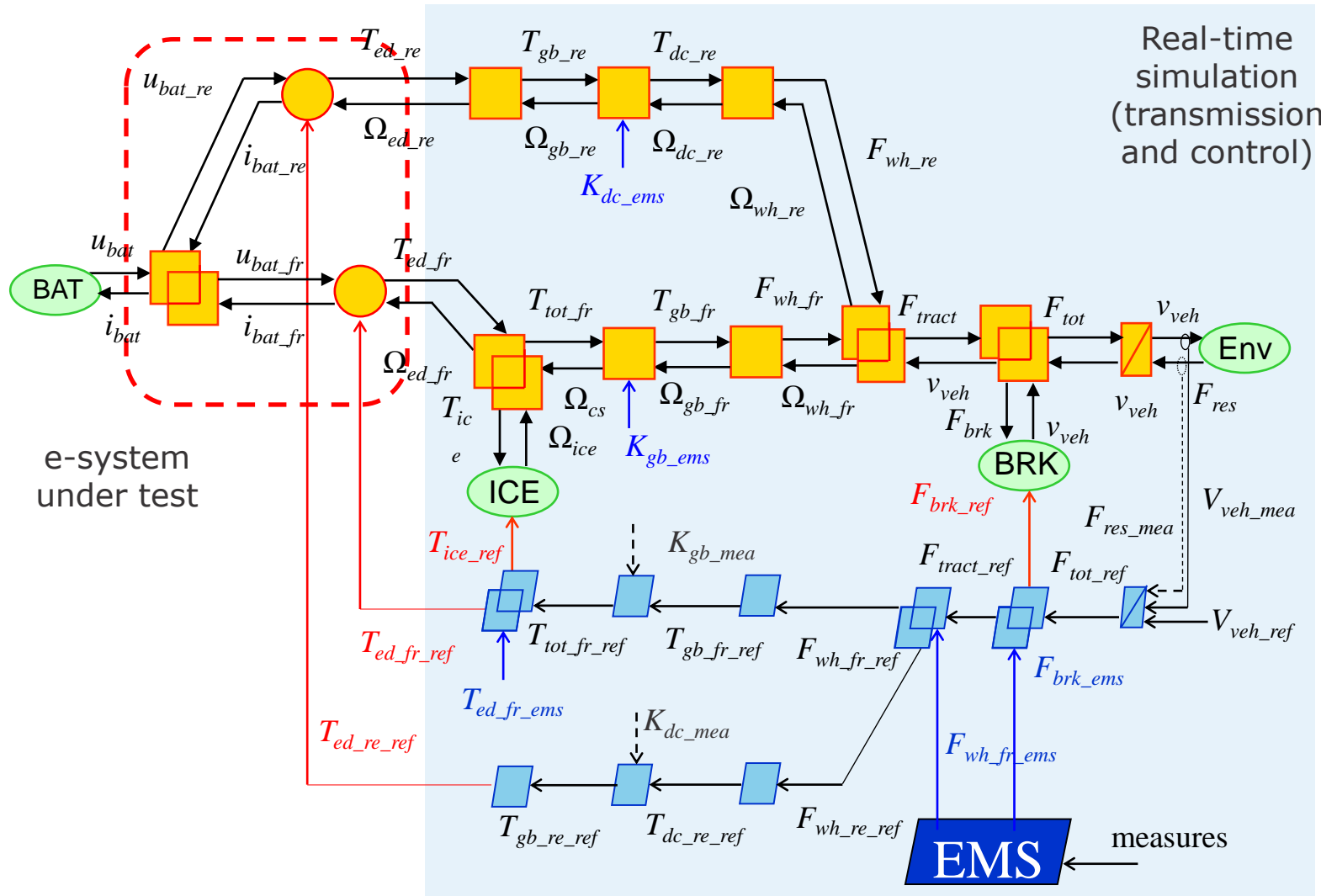


Powerful **A**dvanced **N**-Level **D**igital **A**rchitecture  
for models of electrified vehicles and their components

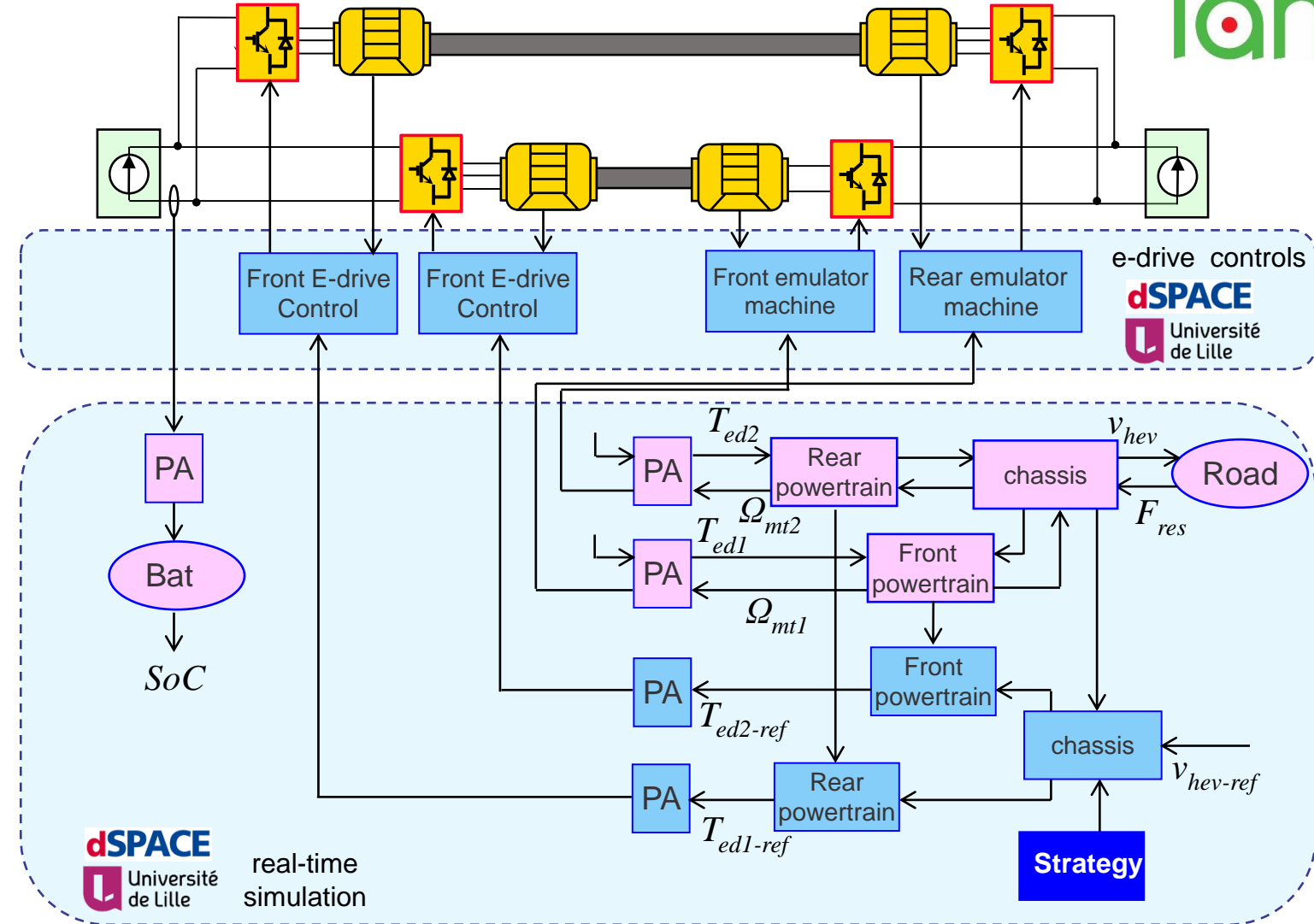
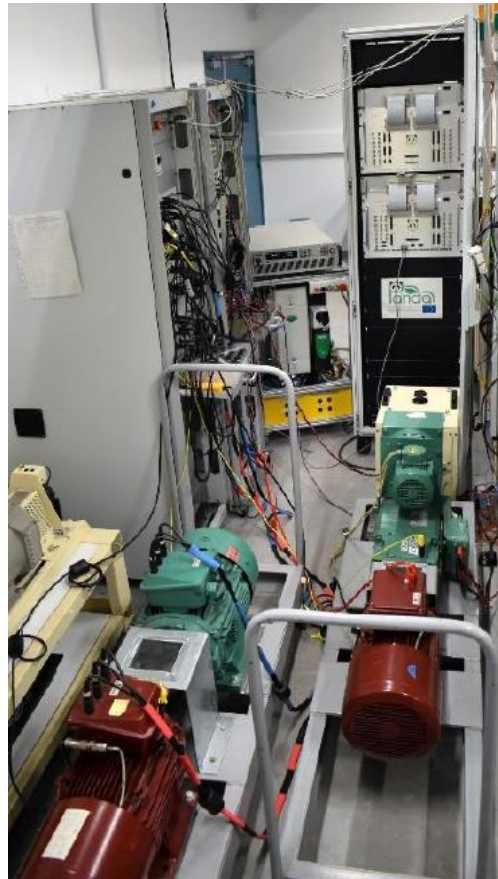
Florian Tournez (ULille)  
Ayoub Aroua (ULille)  
Mircea Ruba (UTCN)



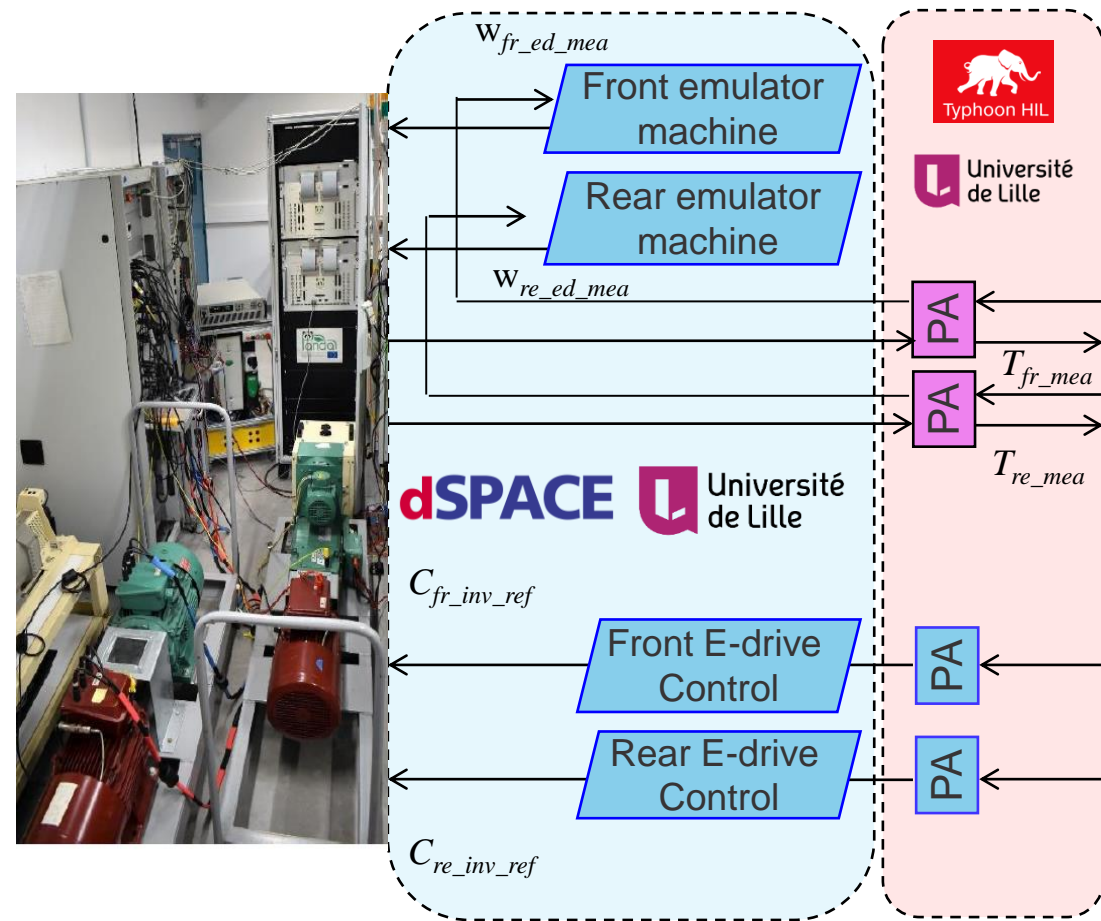
# Studied P-HEV democar



# Stand-alone HiL testing of the P-HEV e-subsystems

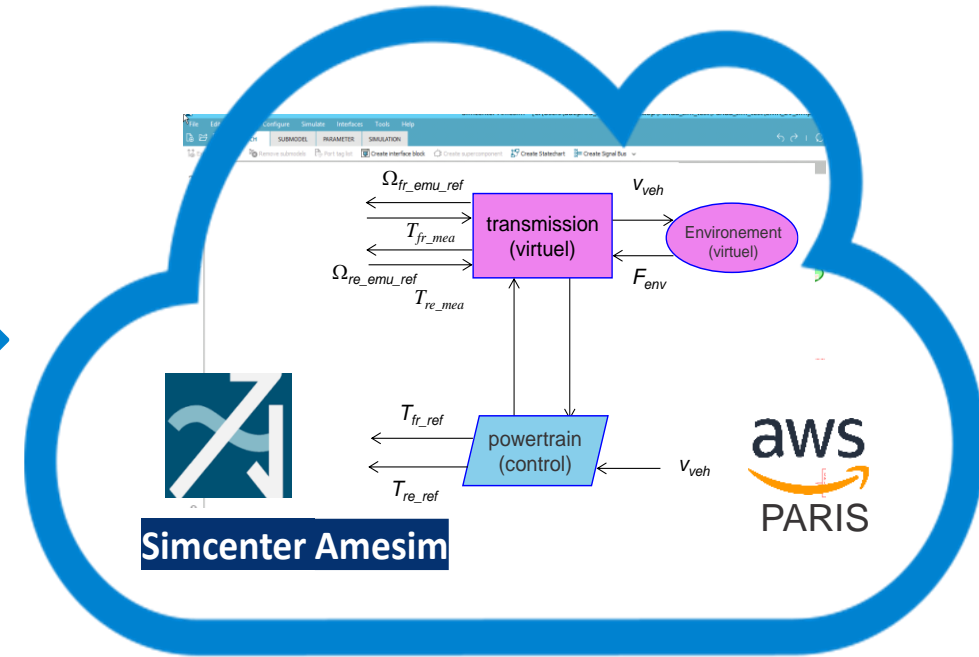


# Cloud-based HiL testing of the e-subsystem of the P-HEV



ULille, Lille, France

200 km



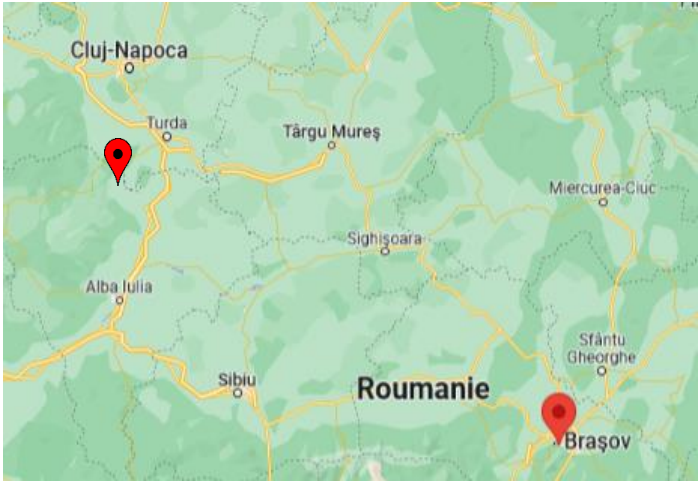
Amazon Web Service, Paris, France



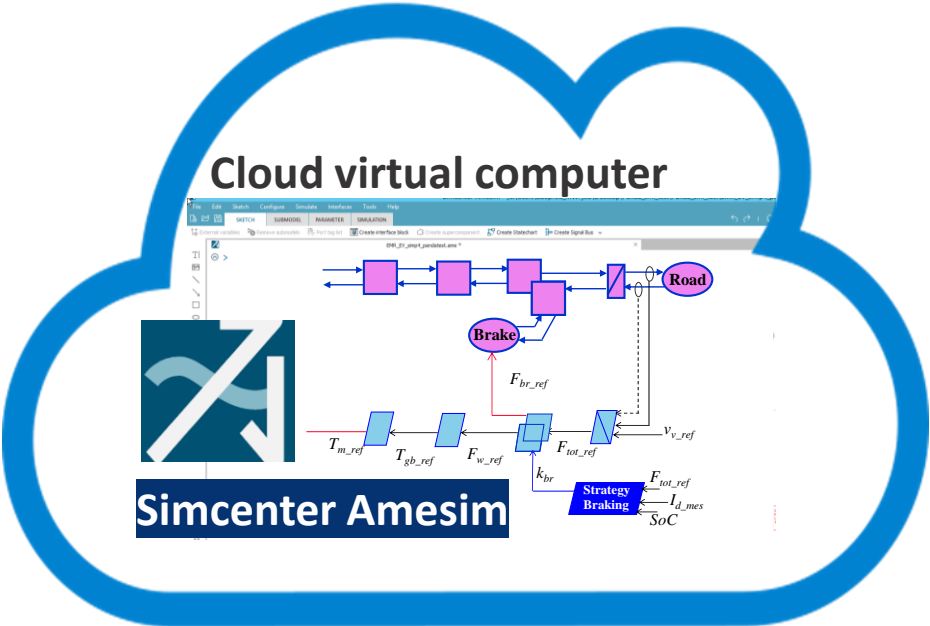
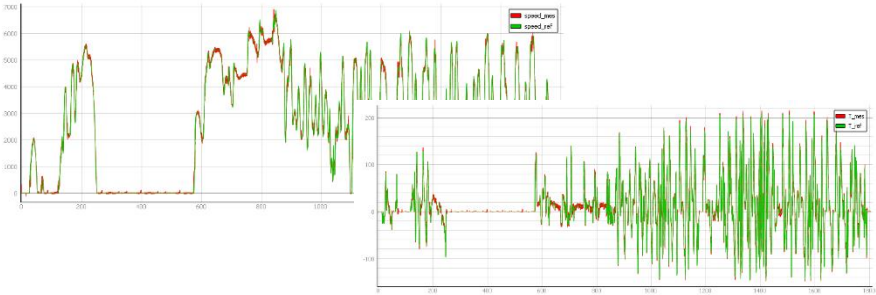
# Cloud-based HiL testing of the e-drive of Renault Zoé



UTCN, Cluj Napoca, Romania



270 km



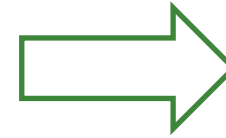
SISW cloud, Brasov, Romania



# Conclusion



- HiL testing of e-drives for different vehicles
- Different experimental set-ups
- Coupling dSPACE / Typhoon ECU / Cloud



High interoperability between different environments  
Thanks to EMR



**Team work !**





# Thanks for your attention!



SIEMENS

