



Computation time optimization using PyAnsys and PyVista libraries for nuclear application

The DAES M-FEM app (based on Python language) is split in two parts: the ANSYS integrated GUI for a direct assessment setup and results visualization, and a compiled, standalone computational core to read and process the data. The new version of the M-FEM app takes advantage of the PyAnsys library: the FE results extraction is significantly accelerated compared to the previous version using the ACT interface. It also offers the possibility to combine analyses from different Workbench projects. The PyVista library is also integrated: the mesh manipulation and paths generation is optimized, leading to an even reduced computation time. The presentation will highlight the different gains in computation time.

Julien Nussbaum & Francois Molette, DAES

