A Finite Cell Method Plugin for FreeCAD

Setting:

- Closely coupling Design and Analysis is highly desirable to speed up development

- Embedded domain methods greatly simplify meshing and might be the solution

Task:

- Implement a embedded domain method based on quadratic finite elements

- Create a plug-in for FreeCAD using your FEM-Kernel

- Post-process the results inside FreeCAD

Project Characteristics

Modeling: ★★★☆☆
Mathematics: ★★★★☆
Programming: ★★★★☆

Tino Bog – tino.bog@tum.de   László Kudela – laszlo.kudela@tum.de
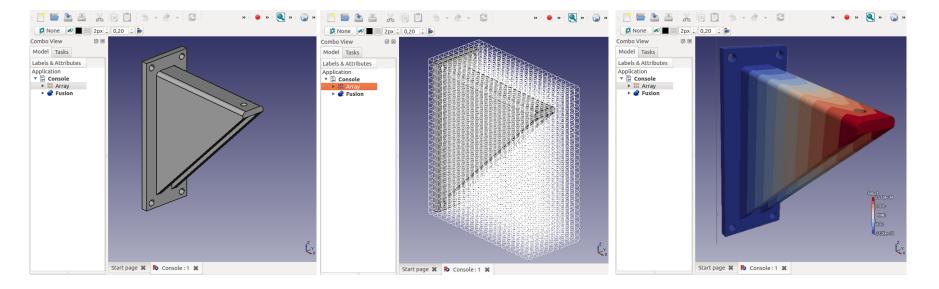
A Finite Cell Method Plugin for FreeCAD

Task:

- Implement a embedded domain method based on quadratic finite elements

- Create a plug-in for FreeCAD using your FEM-Kernel

- Post-process the results inside FreeCAD

Project Characteristics

Modeling: ★★★☆☆
Mathematics: ★★★★☆
Programming: ★★★★☆