

A Finite Cell Method plugin for Rhino

Setting:

- The FCM is a powerful embedded domain method based on high order finite elements
- The chair has developed a flexible high order FEM framework capable of numerical analysis by means of the FCM
- The goal is to interface the FEM code to the geometric modeling software Rhinoceros

Tasks:

Create a Rhinoceros plugin that:

- allows users to set up a 3D linear structural analysis in Rhinoceros
- allows for calling the chair's new code AdhoC++, which computes the solution of the problem
- enables users to visualize basic results, such as displacements and stresses

Project Characteristics

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



