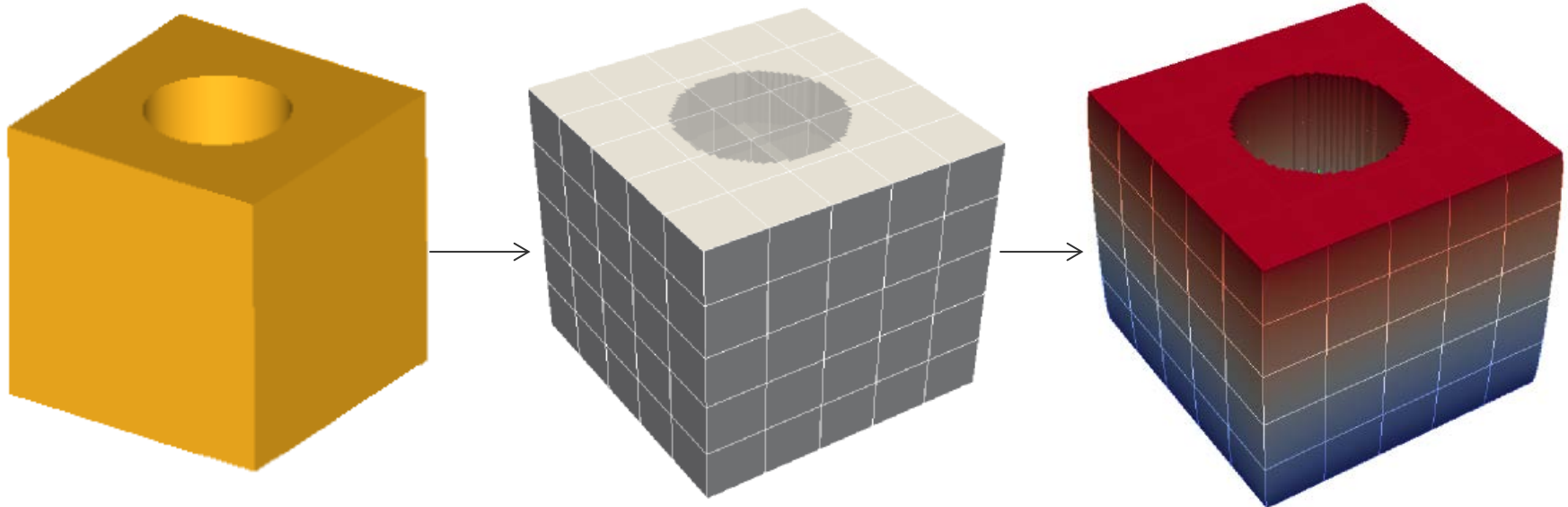


## From CAD to FCM: A CSG-based library for implicit inside-outside queries

- The FCM is a powerful embedded domain method based on high order finite elements
- Highly accurate results can be obtained without having to mesh complex geometries

### Project Characteristics

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



- In order to increase the performance, efficient and accurate inside-outside test on the domain is required – the method of constructive solid geometry can naturally handle such features

# Task

- Implement a CSG-based library for efficient inside-outside queries
- Link the library to AdhoC++, the chair's p-FEM code
- Implement a graphical user interface for interactive construction of solids

