

Cast3M Training Course For Beginners



lundi 15 octobre 2018 - mercredi 17 octobre 2018

Maison de la Simulation

Program

Cast3M presentation:

History

Basic principles

The command language: Gibiane

Mesh:

Points, lines, surfaces, volumes

Free mesh, ruled mesh

Mesh size control

Recovery of parts

Thermal analysis:

Steady state with conduction (RESO)

Transient state (PASAPAS)

Convection and radiation (PASAPAS)

Thermo-mechanical analysis (quasi-static):

Linear elasticity (RESO)

Thermal loading (RESO)

Elasto-plasticity and variable material properties (PASAPAS)

Creation of Gibiane procedures**Post-processing, display, reading/writing data****Using documentation and web site**

This training course is given as a tutorial. After a presentation of the software, participants will build gradually, from an empty file, the Gibiane script that solves the submitted problem.

The subject is the thermo-mechanical behavior of a perforated plate. Several variations of the problem will be studied (with nonlinear material, variable parameters, addition of new boundary conditions).

Some parts will be the subject of detailed points on the whiteboard.

The last afternoon is devoted to various users questions about Cast3M. Participants can bring their own scripts in order to discuss their modeling.

The training course takes place in a computer room. Each participant will have a PC with the latest version of Cast3M.

The presentation slides can be downloaded on the Cast3M web site:
<http://www-cast3m.cea.fr/index.php?xml=formations>

