CODE_ASTER TRAINING
Mar. 13th — Mar. 16th

By EDF Code_Aster Development team

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Jointly organized by
Electricite De France Group
Sun Yat-Sen University Institut Franco-Chinois de l'Energie Nucléaire
National Supercomputer Center In Guangzhou

Code_Aster **IS EDF'S GENERAL PURPOSE, OPEN SOURCE STRUCTURAL AND THERMOMECHANICS ANALYSIS SOFTWARE.** www.code-aster.org

THERMO-MECHANICAL ANALYSES IN LINEAR AND NON-LINEAR STATICS AND DYNAMICS

Training Program

* NUMBER OF PARTICIPANTS IS LIMITED TO 40 PERSONS

DATE	LEVEL	MORNING	AFTERNOON
Mar.13th	Basic	Introduction of Code_Aster and Salome-Meca : Basic theory, applications, framework, service etc. EDF software development policy	Introduction to FEM for solving mechanic problems A simple mechanical study Exercise 1: Calculation of an elastic perforated plate and mesh adaption
Mar.14th	Basic	Introduction to FEM for solving thermo-mechanical problems A simple thermal study Exercise 2: Pipe elbow under thermal-mechanical stress	Introduction to FEM for solving non-linear problems Presentation of Code_Aster industrial application Exercise 3: Yield-point load of a perforated plate
Mar.15th	Advanced	Introduction to FEM for dynamics problems Exercise 4: Modal analysis of a plane mock-up	Advanced dynamics & Fluid Structure Interaction Exercise 5: Seismic analysis of a dam and its reservoir
Mar.16th	Advanced	Introduction to FEM for Fracture mechanics & XFEM Exercise 6: Crack plate in tension Exercise 7: Circular crack in infinite body	Introduction of development within Code_Aster and HPC feature Presentations of Code_Saturne & Telemac and cloud platform. Discussion

Code_Aster is integrated in platform Salome, with user-friendly graphical interface and easy installation of a complete framework. It contains a wide range of constitutive laws (Elasticity, Elasto-plasticity, Elasto-visco-plasticity, fuel rods and metal under irradiation). It is also possible to carry out parallel calculations.