Politecnico di Torino

Department of Environment, Land and Infrastructure Engineering

GEAM ASSOCIAZIONE GEORISORSE E AMBIENTE

DIGYM DEPARTAMENTO DE INGENIERÍA GEOLÓGICA Y MINERA

Seminar and classwork on

Modelling with LS – DYNA (LSTC - Ansys)
with Introductory features for F.E.M. modelling

The seminars will be taught in English and presented by **Prof. Ricardo Castedo Ruiz**, Digym, UPM, Madrid, visiting professor at DIATI
Welcome address by Claudio Oggeri (DIATI)

Venue: DIATI Dept, Entrance **DIATI3**, classroom «Bibolini*» and «Meeting Room 1st floor**»
Dates: **15*, 17*, 29**, 30* November 2022, 4-6 p.m.**

Free access, link to Politecnico academic licenses will be provided for personal use during classes. Code can be installed on personal devices for practice during classes
Teaching material - pdf file of presentations - will be available.

The Seminar is intended for MSc students, PhD candidates, researchers, practitioners.
Up to 40 participants will be admitted, please register through this form **by Nov 11**:
https://forms.office.com/r/yc77LV7N44

FIELDS OF APPLICATION:

- Automotive Crashworthiness & Occupant Safety
- Metal Forming
- Aerospace industry application
- Drop testing & Impact analysis
- Can and shipping container design
- Electronic component design
- Glass forming
- Plastics, mold, and blow forming
- Biomedical (heart valves)
- Metal cutting
- Earthquake engineering
- Failure analysis
- Sports equipment (golf clubs, golf balls, baseball bats, helmets)
- Civil engineering (offshore platforms, pavement design)
- Explosions (underwater mines, shaped charges, EFP's, Penetration)

LS-DYNA (structure, idea behind, etc.)

PRE-PROCESSOR
Generates the FE-model
Applies boundary conditions etc

LSTC Livermore Software Technology Corp. LS-PrePost

History?
Geometry
Material
Process

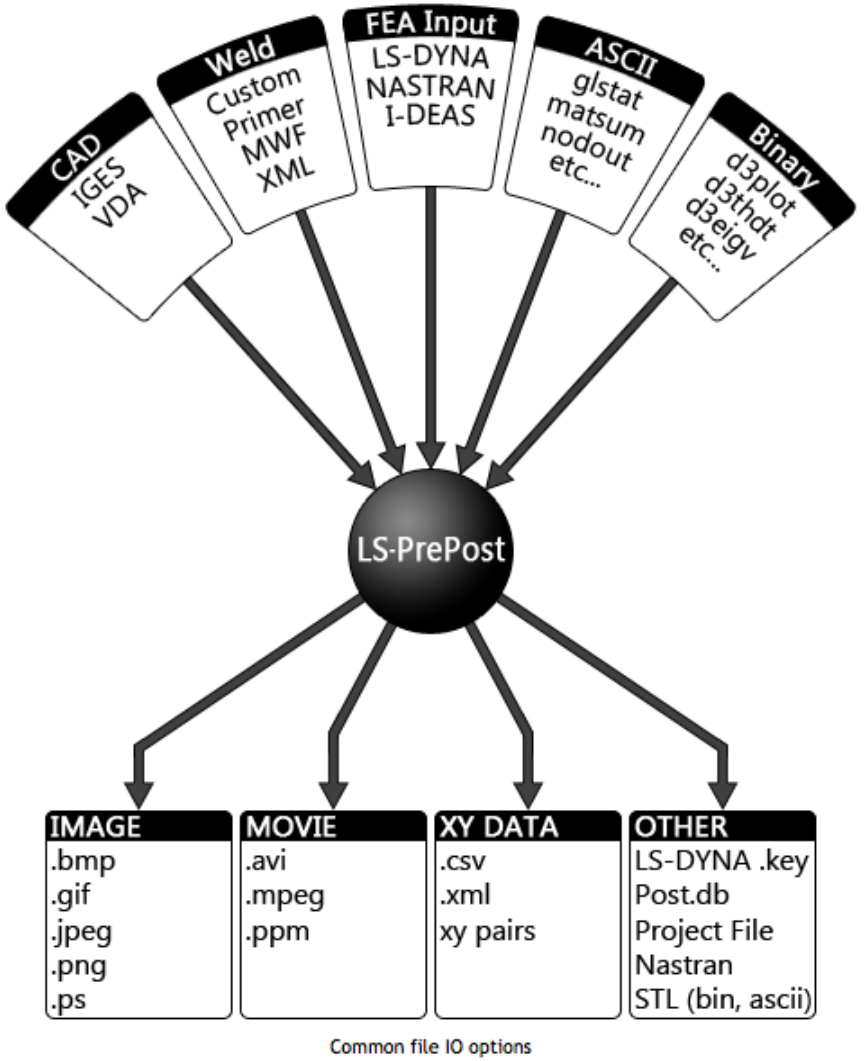
SOLVER
Solves the numerical model

LSTC Livermore Software Technology Corp. LS-DYNA

POST-PROCESSOR
View the results

LSTC Livermore Software Technology Corp. LS-PrePost

Dependence on analysis



Common file IO options