



Locations:

Livermore Software Technology Corp.

7374 Las Positas Rd. Livermore, CA 94551

1740 West Big Beaver Road Troy, MI 48084

Contact: classes@lstc.com

www.lstc.com/training

EM - Eddy Current application

Instructor: Inaki

1 Day - \$200, Students \$200 w/student ID

Includes on-site continental breakfast, lunch, breaks, class notes

Includes 30-day demonstration license

Prerequisite: Students should be familiar with LS-DYNA.

Objective: Attendees will gain knowledge in how to use the EM solver for Eddy current applications.

Description: This course is recommended for attendees who have industrial applications that involve Eddy currents such as electromagnetic metal forming, inductive heating, railguns...

Contents:

- **Electromagnetic metal forming applications :**
 - Keyword introduction
 - Eddy currents, mesh size and timestep considerations
 - EM interaction between conductors : the BEM system
 - Coupling with the structural and thermal solvers
 - How to optimize the analysis and take 'shortcuts'.
 - The axisymmetric solver

- **EM contact and erosion**
 - The railgun example
 - How to turn parts of the EM conductors on or off and handle erosion.

- **Inductive heating. Problem set up.**

- **Magnetic materials**