

**March 28 and 30, 2023 – 11:00am-2:00pm**  
**March 31, 2023 – 11:00am-2:00pm, 3:00pm-6:00pm**

## **Prof. Daniela Addressi**

*Associate Professor, Department of Structural and Geotechnical Engineering, Sapienza University of Rome*

# **Finite Element Method**

This class introduces the fundamentals of the Finite Element Method (FEM) to handle the numerical solution of general mechanical problems, with special reference to the structural framework. As the most commonly used numerical codes rely on the classical displacement-based formulation, this is illustrated in detail. Also, two- and three-field mixed FE approaches are briefly introduced. The main FE families adopted to solve 1D, 2D and 3D continuum problems are dealt with, that is truss, frame, solid, plate and shell FEs are described. Some hints concerning numerical pathological issues and solution strategies are finally given.

Program:

[https://phd.uniroma1.it/web/course---finite-element-method\\_ns4729EN\\_EN.aspx](https://phd.uniroma1.it/web/course---finite-element-method_ns4729EN_EN.aspx)

Registration form:

[https://docs.google.com/forms/d/e/1FAIpQLSfLRjMC3U\\_XdagCfxpsAKT\\_KjNr3ntLefF408qXzgEhmSPhhw/viewform?usp=sf\\_link](https://docs.google.com/forms/d/e/1FAIpQLSfLRjMC3U_XdagCfxpsAKT_KjNr3ntLefF408qXzgEhmSPhhw/viewform?usp=sf_link)