



Università degli Studi di Pavia Computational Mechanics & Advanced Materials Group - DICAr



Examples of Biomechanical Applications Using Ansys Mechanical

The main aim of the seminar is to show a few examples of biomechanical simulations resolved with Ansys Mechanical. After a general overview of the Workbench environment, the following applications will be discussed; 1) lumbar motion segment, 2) hip implant, and 3) crack propagation in human teeth. Advanced functionalities such as coupled pore- pressure-thermal elements and fracture mechanics capabilities will be presented as well as tools that allow a robust clean-up of CAD geometries.

Bone (Element SCALD187)

Intervertebral Disc (Coupled Fore-Pressure Element CP217)
Bone (Element SCALD187)

Bone (Element SCALD187)

About the speaker: Davide Fugazza (M.Sc., Ph.D.) works for Ansys Italia as a Principal Application engineer. His main duties include technical support for structural mechanics applications, pre-sales activities as well as leading a group of people testing assemblies consisting of beam and shell elements. Over the years he has delivered a large number of standard and customized training classes across Europe and contributed to writing new training material on advanced material models and user- programmable features. Prior to returning to Italy, he was an employee of Ansys Belgium for 10 years.

Dr. Davide Fugazza

Ansys Italia, Principal Application engineer

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