

Università degli Studi di Pavia

Dipartimento di Meccanica Strutturale

In collaborazione con

Centro di Simulazione Numerica Avanzata – CeSNA

Istituto Universitario di Studi Superiori

A Numerical Model of Atherosclerotic Lesions in Human Arteries

We present a three-dimensional finite element model of stenotic human arteries, to investigate the influence of the geometry and tissue properties on the stress distribution and to simulate the evolution of the plaque rupture. Plaque rupture manifests at the locations where the stress induced by mechanical and hemodynamic forces exceeds the strength of the material. Plaque rupture can be a spontaneous process (pulse-pressure) or can be caused by an external mechanical action (balloon angioplasty).

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*Lunedì 19 Ottobre, Aula MS1
Seminar tentative schedule: 15.00 – 16.00
Dipartimento di Meccanica Strutturale
Via Ferrata, 1 – Pavia*

Anna Ferrara has a post-doc position at the Structural Mechanics Department of the University of Pavia