Instituto Universitario de Investigación de Matemáticas y Aplicaciones
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Seminario Rubio de Francia

Conferencia

por

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Título:

Propagation of waves in viscoelastic solids

Resumen: I will explain ongoing work with my team (Tom Brown, Shukai Du, and Hasan Eruslu) on Finite Element simulation of elastic wave propagation in media that are modeled using a strain-to-stress relation that keeps track of the past evolution of the solid. The family of models I will discuss includes the classical (Zener, Maxwell, Voigt) differential viscoelastic model, fractional derivative version thereof, and combinations of all the above with pure elastic behavior. The analysis will be presented using transfer function techniques, but I will explain how in some cases refined results can be found using techniques of semigroup theory.

Fecha: jueves, 10 de mayo de 2018.
Hora: 12:00 horas.
Lugar: seminario Rubio de Francia, edificio de Matemáticas, primera planta.
Web: `http://www.unizar.es/analisis_matematico/seminario.html`