

DEPARTAMENTO DE
MECANICA DE MEDIOS
CONT.Y T. ESTRUCTURAS

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Áreas de conocimiento:

- MECANICA MEDIOS CONTINUOS Y TEORIA ESTRUCTURAS

ÁREA DE CONOCIMIENTO: MECANICA MEDIOS CONTINUOS Y TEORIA ESTRUCTURAS

Actividades de investigación

Tesis Doctorales

- Análisis Sísmico de Dobles Túneles
Autores: SÁNCHEZ-MERINO, A.L.
Director: NAVARRO, C.
Año: 2009
- Estudio experimental y numérico del comportamiento de tanques integrados de combustible frente a impacto de alta velocidad
Autores: VARAS, D.
Director: ZAERA, R.
Centro donde se presentó: CAMPUS DE LEGANES
Año: 2009
- Obtención de leyes tensión-deformación de materiales viscoplásticos a partir de mediciones del incremento de temperatura asociado a su deformación plástica
Autores: GUZMAN, R.E.
Director: PEREZ, J. L.
Año: 2009

Publicaciones y actividades de difusión de resultados

Publicaciones en revistas científicas internacionales

- FERNANDEZ-SAEZ, J. ; VADILLO, G.
An analysis of Gurson model with parameters dependent on triaxiality based on unitary cells ,
EUROPEAN JOURNAL OF MECHANICS A-SOLIDS, Núm. 28, 2009, pp. 417-427, FRANCIA.
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- GARCIA-CASTILLO, S.K.; SÁNCHEZ-SÁEZ, S. ; LÓPEZ-PUENTE, J. ; BARBERO, E. ; NAVARRO, C.
Impact behaviour of preloaded glass/polyester woven plates, *Composites science and technology*, Vol. 69, Núm. 6, 2009, pp. 711-717, REINO UNIDO.

- GUZMAN, R.E.; MELENDEZ, J. ; ARANDA, J. M. ; ESSIA, Y.; LOPEZ, F. ; PEREZ, J. L.
Measurement of temperatura increment in compresive guasi-static and dynamic test usin infrared thermography , *Strain*, Vol. 45, 2009, pp. 179-189, REINO UNIDO.
- GUZMAN, R.E.; PEREZ, J.L.; MELÉNDEZ, J.; ZAR, J.
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- KLEPACZKO, J.R.; RUSINEK, A.; RODRÍGUEZ-MARTÍNEZ, J.A.; PECHERSKI, R.; ARIAS, A.
Modelling of thermoviscoplastic behavior of DH36 and Weldox 460 E structural steels at wide ranges of strain rates and temperatures, comparison of constitutive relations for impact problems, *MECHANICS OF MATERIALS*, Vol. 41, Núm. 5, 2009, pp. 599-621, HOLANDA.
- LÓPEZ-PUENTE, J. ; VARAS, D. ; LOYA, J. A. ; ZAERA, R.
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An efficient implementation of boundary conditions in an ale model for orthogonal cutting, *JOURNAL OF THEORETICAL AND APPLIED MECHANICS*, Vol. 47, Núm. 3, 2009, pp. 599-616, POLONIA.
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- RODRÍGUEZ-MARTÍNEZ, J.A.; RUSINEK, A.; ARIAS, A.
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- RUSINEK, A.; RODRÍGUEZ-MARTÍNEZ, J.A.
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- VARAS, D. ; LÓPEZ-PUENTE, J. ; ZAERA, R.
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Ponencias y Comunicaciones a congresos

- ARIAS, A. ; FORQUIN, P.; ZAERA, R.
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- BUITRAGO, B.; GARCIA-CASTILLO, S.K.; BARBERO, E.
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- FERNÁNDEZ, D.; ZAERA, R.
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- GARCIA-CASTILLO, S.K.; BUITRAGO, B.; BARBERO, E.
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- GUZMAN, R.; MELENDEZ, J. ; ARANDA, J. M. ; LOPEZ, F. ; PEREZ, J. L.
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Numerical analysis of the influence of cutting speed in machined induced residual stresses in aero-engine alloys , 9th International Conference on the Mechanical and Physical Behaviour of Materials under Dynamic Loading, *DYMAT 2009, Brussels*, BÉLGICA, 2009.
- MIGUELEZ, M. H. ; ZAERA, R.; MOLINARI, A.; MUÑOZ, A.
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- RODRÍGUEZ-MARTÍNEZ, J.A.; RUSINEK, A.; ARIAS, A.
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Experimental and Numerical Study of High Velocity Impacts on Carbon/Epoxy Laminates; en: DYMAT 2009 - 9th International Conference on the Mechanical and Physical Behaviour of materials under Dynamic Loading Brussels, Belgium. September 7-11 2009, 2009.
- VARAS, D. ; ZAERA, R.; LÓPEZ-PUENTE, J.
Analysis of the hydrodynamic RAM problem using coupled computational methods , Workshop on Theoretical and Experimental Approaches for Dynamic Industrial Processes, MADRID, ESPAÑA, 2009.
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- ZAERA, R.; CASADO, A.; FERNANDEZ-SAEZ, J. ; ANGULO, M.E.; RUSINEK, A.
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Actividades de cooperación internacional

Acciones integradas y bilaterales

- BARBERO, E. ; SÁNCHEZ-SÁEZ, S. ; NAVARRO, C. ; SANTIUSTE, C. ; LOPEZ-PUENTE, J.; GARCIA-CASTILLO, S.K.
Estudio del comportamiento dinámico del corcho aglomerado y sus aplicaciones en estructuras absorbedoras de energía, *Departamento de Ingeniería Mecánica. Universidad de Coimbra*, Ministerio de Educación y Ciencia. Dirección General de Investigación, PORTUGAL. Duración: de 2008 a 2009.

Actividades de formación y movilidad de personal investigador

Estancias en otros centros

- CARLOS SANTIUSTE ROMERO
Título: Estancia en la universidad de Aalborg (Dinamarca)
Centro Externo: Aalborg University
País: DINAMARCA
Duración: 01/08/2009 a 22/12/2010.
- GUADALUPE VADILLO MARTIN
Título: Estancia de formación postdoctoral
Centro Externo: KTH (Royal Institute of Technology)
País: SUECIA
Duración: 01/10/2008 a 01/02/2009.
- JOSE ANTONIO RODRIGUEZ MARTINEZ
Título: Estancia de formación Pre-doctoral
Centro Externo: Escuela Nacional de Ingenieros de Metz
País: FRANCIA
Duración: 01/10/2008 a 28/02/2009.
- JOSE ANTONIO RODRIGUEZ MARTINEZ
Título: Estancia de formación Pre-doctoral
Centro Externo: Escuela Nacional de Ingenieros de Metz
País: FRANCIA
Duración: 01/10/2009 a 31/01/2010.