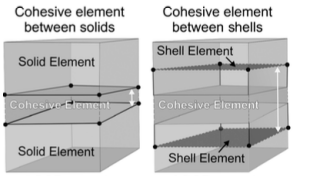
Professor Pedro P. Camanho



a) 3D cohesive elements b) Shell cohesive elements

Fig. 2 Cohesive elements: a) 3D and b) shell.

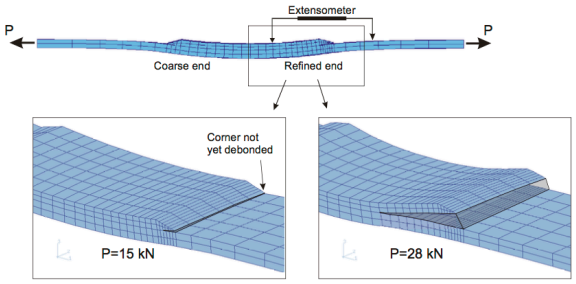


Figure 7. Deformed plots of skin/stringer model at applied loads of 15 and 28 kN (8X magnified).

Fig.1: Carlos G. Davila, Pedro P. Camanho and Albert Turon, "Effective simulation of delamination in aeronautical structures using shells and cohesive elements", AIAA Journal of Aircraft, March 2008; Fig. 7: C.G. Davila, P.P. Camanho and M.F. de Moura, "Progressive damage analyses of skin-stringer debonding", Paper from unidentified conference, February 2004, https://www.researchgate.net/publication/4707157

See:
https://sigarra.up.pt/feup/en/func_geral.formview?p_codigo=240020
https://scholar.google.com/citations?user=eaMG0xYAAAAJ&hl=en
https://pt.linkedin.com/in/pedro-ponces-camanho-84629513
https://www.researchgate.net/profile/Pedro_Camanho

Department of Mechanical Engineering
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Biography:
Pedro Camanho (MSc in Mechanical Engineering, UPorto, 1995) received his PhD in Composite Materials from the Department of Aeronautics, Imperial College London, UK, in 1999. In the same year he joined the Institute of Mechanical Engineering and Industrial Management (INEGI - www.inegi.up.pt) as Director of the Structural Integrity Unit and the Department of Mechanical Engineering of the University of Porto as Assistant Professor. Since 2014 he has been Full Professor at the Department of Mechanical Engineering of the University of Porto. Pedro Camanho is currently the Vice-President of INEGI.

Research Interests:
The main research interests of Pedro Camanho are the mechanics of deformation and fracture of advanced polymer composite materials, and new concepts for lightweight composite materials for aerospace applications such as hybrid, nano-structured, and ultra-thin composites.

Awards and Special Recognition:

Pedro Camanho is the recipient of the 2006 NASA H.J.E. Reid Award for Outstanding Scientific Paper, of the 2005 Young Researcher in Applied and Computational Mechanics Award from the Portuguese Association of Theoretical, Applied and Computational Mechanics, the 2005-2009 Engineering Fracture Mechanics Most Cited Articles Award, and the 2016 Mechanics of Materials Highly Cited Research Award. He has published over 100 papers in international peer reviewed journals that received over 6800 independent citations (Scopus h-index of 44, independent citations). His work has been successfully transferred to the industry and services: finite elements implemented by ABAQUS (Dassault Systèmes), materials models implemented in LS-DYNA, failure criteria in HYPERSIZER, ESACOMP and ANSYS, and test methods that are used by both the automotive and aeronautical industries.

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