Professor Laurent Gallimard

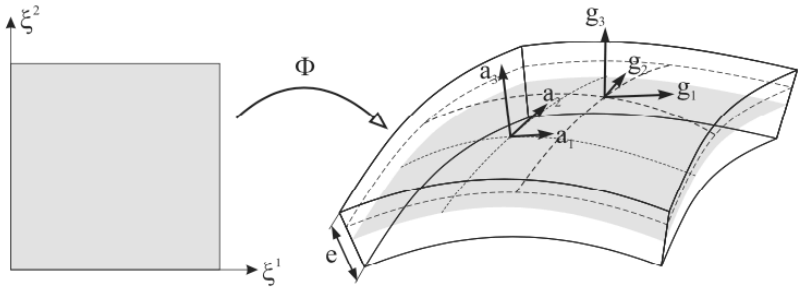

Fig. 1 The map $\vec{\Phi}$ and the local basis vectors $\vec{a}_i$ and $\vec{g}_i$ for a shell panel

From: Philippe Vidal, Olivier Polit, Laurent Gallimard and Michele D'Ottavio, "Modeling of cylindrical composite shell structures based on the Reissner's mixed variational theorem with a variable separation method", Advanced Modeling and Simulation in Engineering Sciences, Vol. 6, No. 7, 2019

See:
https://www.researchgate.net/profile/Gallimard_Laurent

Laboratoire Energétique, Mécanique, Electromagnétisme (LEME)
Université Paris Ouest Nanterre-La Défense, Ville d'Avray, France

Education:

Habilitation à diriger des recherches (H.D.R.) in mechanics, Université Paris 6, 2002
PhD in mechanics, Ecole Normale Supérieure de Cachan, 1994
DEA in structural mechanics, Université Paris 6 - ENS de Cachan, 1990
Civil Engineer, Ecole Spéciale des Travaux Publics, 1988

Research Interests:

A posteriori error estimation for finite element computations; Reduced order modeling: PGD, reduced basis methods, modeling error, reliability; Thermo-mechanical computations in very high cycle fatigue regime; Active vibration control of smart structures using piezo-electric materials

Selected Publications:

Bruant I, Gallimard L, Nikoukar S. Optimal piezoelectric actuator and sensor location for active vibration control, using genetic algorithm. Journal of Sound and Vibration 2010; 329:1615–1635.
I. Bruant, L. Gallimard, and S. Nikoukar, "Optimization of piezoelectric sensors location and number using a genetic algorithm," Mech. Adv. Mater. Struct., vol. 18, pp. 469–475, 2011.

Gallimard, L., Vidal, P. and Polit, O. [2011] “Coupling finite element and reliability analysis through proper generalized decomposition model reduction,” International Journal for Numerical Methods in Engineering 95(13), 1079–1093
Vidal, P., Gallimard, L. and Polit, O. [2012] “Assessment of a composite beam finite element based on the proper generalized decomposition,” Computers and Structures 94(5), 1900–1910.
Vidal, P., Gallimard, L. and Polit, O. [2012] “Composite beam finite element based on the proper generalized decomposition,” Computers and Structures 102–103, 76–86.
Vidal, P., Gallimard, L. and Polit, O. [2013] “Proper generalized decomposition and layer-wise approach for the modeling of composite plate structures,” International Journal of Solids and Structures 50(14–15), 2239–2250.
Vidal, P., Gallimard, L. and Polit, O. [2014] “Shell finite element based on the proper generalized decomposition for the modeling of cylindrical composite structures,” Computers and Structures 132, 1–11.
Vidal, P., Gallimard, L. and Polit, O. [2014] “Explicit solutions for the modeling of laminated composite plates with arbitrary stacking sequences,” Composites Part B: Engineering 60, 697–706.
Gaetano Giunta, Salim Belouettar, Olivier Polit, Laurent Gallimard, Philippe Vidal and Michele D’ottavio, “Hierarchical beam finite elements based upon a variables separation method”, International Journal of Applied Mechanics, Vol. 8, No. 2, 1650026, March 2016
P. Vidal, L. Gallimard and O. Polit, “Modeling of piezoelectric plates with variable separation for static analysis”, Smart Materials and Structures, Vol. 25, No. 5, 055043, May 2016
P. Vidal, L. Gallimard and O. Polit, “Robust layerwise C0 finite element approach based on a variable separation method for the modeling of composite and sandwich plates”, Finite Elements in Analysis and Design, Vol. 139, pp 1-13, February 2018
P. Vidal, L. Gallimard and O. Polit, “Multiresolution strategies for the modeling of composite shell structures based on the variable separation method”, International Journal for Numerical Methods in Engineering, Vol. 117, No. 7, pp 778-799, 17 February 2019
P. Vidal, G. Giunta, L. Gallimard and O. Polit, “Modeling of composite and sandwich beams with a generic cross-section using a variable separation method”, Composites Part B: Engineering, Vol. 165, pp 648-661, 15 May 2019
P. Vidal, L. Gallimard and O. Polit, “Free vibration analysis of composite plates based on a variable separation method”, Composite Structures, Vol. 230, Article 111493, 15 December 2019