



**Professor Abderrahim Houmat**

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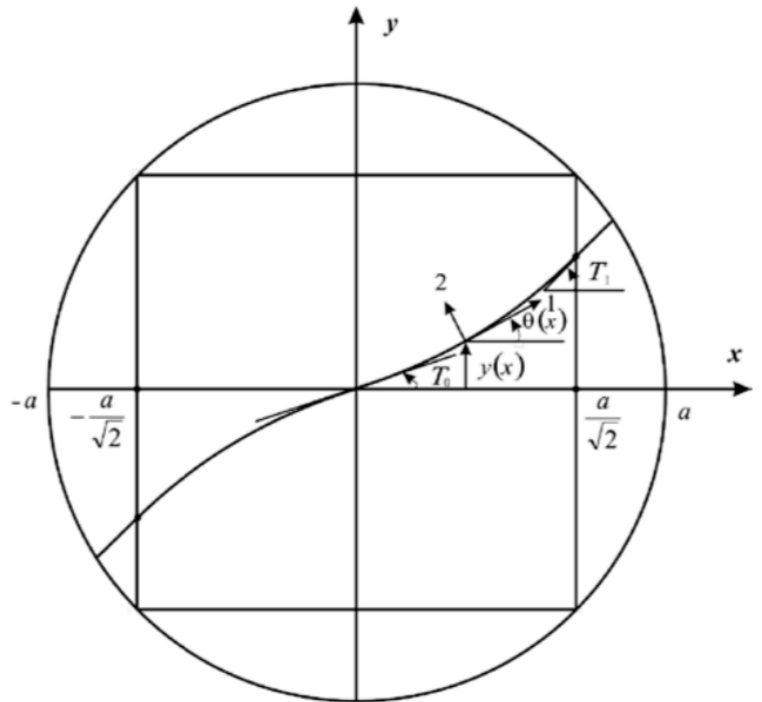
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**Selected Publications:**

- Houmat, A., A sector Fourier p-element applied to free vibration analysis of sectorial plates. *Journal of Sound and Vibration*, 2001. 243(2): p. 269-282.
- Houmat, A. , 2005, “ Free Vibration Analysis of Membranes Using the h-p Version of the Finite Element Method,” *J. Sound Vib.*, 282(1–2), pp. 401–410
- Houmat A (2008) In-plane vibration of plates with curvilinear plan-forms by a trigonometrically enriched curved triangular p-element. *Thin-Walled Struct* 46:103–111
- Houmat A.: Mapped infinite p-element for two-dimensional problems of unbounded domains. *Comput. Geotech.* 35, 608–615 (2008)
- Houmat, A. [2008] “ Large amplitude free vibration of shear deformable laminated composite annular sector plates by a sector p-element,” *International Journal of Non-Linear Mechanics* 43(9), 834–843.
- Houmat A.: Nonlinear free vibration of a shear deformable laminated composite annular elliptical plate. *Acta Mech.* 208, 281–297 (2009)
- Belalia, S., Houmat, A.: Non-linear free vibration of elliptic sector plates by a curved triangular p-element. *Thin Walled Struct.* 48(4), 316–326 (2010).
- S.M. Chorfi, A. Houmat, Non-linear free vibration of a functionally graded doubly-curved shallow shell of elliptical plan-form, *Composite Structures* 92 (2010) 2573–2581.



**Figure 1:** Reference fiber path and orientation.

From: Ahmed Guenanou and Abderrahim Houmat, “Free vibration analysis of symmetrically laminated composite circular plates with curvilinear fibers”, *Sci. Eng. Compos. Mater.*, Vol. 24, No. 1, pp 111-121, 2017

Belalia, S.A. and Houmat, A., Nonlinear free vibration of functionally graded shear deformable sector plates by a curved triangular p-element, *European Journal of Mechanics - A/Solids*, 35, 1-9, 2012.

Abderrahim Houmat, "Large amplitude free vibration of a shear deformable laminated composite parabolic plate with parabolically orthotropic plies", *Acta Mechanica*, Vol. 223, No. 1, pp 145-160, January 2012

Houmat A, Rashid MM. Coupling of h and p finite elements: application to free vibration analysis of plates with curvilinear plan-forms. *Appl Math Model*. 2012;36:505–520

A. Houmat , Nonlinear free vibration of laminated composite rectangular plates with curvilinear fibers, *Compos. Struct.* 106 (2013) 211–224.

Houmat, A., Three-dimensional hierarchical finite element free vibration analysis of annular sector plates. *Journal of Sound and Vibration*, 2014. 276(1-2): p. 181-193.

A. Houmat, "Nonlinear free vibration analysis of variable stiffness symmetric skew laminates", *European Journal of Mechanics – A/Solids*, Vol. 50, pp 70-75, March-April 2015

A. Houmat, "Nonlinear free vibration of non-prismatic single-walled carbon nanotubes by a non-local shear deformable beam p-element", *Acta Mechanica*, Vol. 227, No. 4, pp 1051-1065, April 2016

Guenanou, A., Houmat, A.: Optimum stacking sequence design of laminated composite circular plates with curvilinear fibres by a layer-wise optimization method. *Eng. Optim.* (2017).

Ahmed Guenanou and Abderrahim Houmat, "Free vibration analysis of symmetrically laminated composite circular plates with curvilinear fibers", *Sci. Eng. Compos. Mater.*, Vol. 24, No. 1, pp 111-121, 2017