



Professor Dan Givoli

See:

<http://ae-www.technion.ac.il/staff/pages/11>
<http://aerodyne.technion.ac.il/staff/pages/givoli.htm>
http://aerodyne.technion.ac.il/~givolid/my_homepage.html
<http://www.informatik.uni-trier.de/~ley/db/indices/a-tree/g/Givoli:Dan.html>
<http://0-www.worldcat.org/novacat.nova.edu/identities/lccn-n92-42757>
<http://www.barnesandnoble.com/c/dan-givoli>
<http://www.amazon.com/gp/aw/s?i=stripbooks&field-author=Dan%20Givoli>
<http://www.begellhouse.com/authors/4f84936564380772.html>
<http://journalogy.net/Author/12799551/dan-givoli>

Biographical Data

b. Israel 1956. B.Sc. Tel Aviv University, 1983. M.Sc. Tel Aviv University, 1985. Ph.D. Stanford University, 1988. **At Technion since 1988.** Rensselaer Polytechnic Institute, 1995-96. Naval Postgraduate School, 2001-02. Professor since 2001. Dean 2004-05. Lawrence and Marie Feldman Chair in Engineering.

Main Interests

Computational solid mechanics, finite element methods, computational methods for acoustic and elastic waves, combination of analytic and numerical methods, space structures.

Selected Publications

Avinoam Libai and Dan Givoli, “Incremental stresses in loaded orthotropic circular membrane tubes—I. Theory”, *International Journal of Solids and Structures*, Vol. 32, No. 13, July 1995, pp. 1907-1925,

Dan Givoli and Avinoam Libai, “Incremental stresses in loaded orthotropic circular membrane tubes—II. Numerical solution”, *International Journal of Solids and Structures*, Vol. 32, No. 13, July 1995, pp. 1927-1947

“Parallel adaptive finite element analysis of viscous flows based on a combined compressible-incompressible formulation”, *Int. J. Numerical Methods for Heat and Fluid Flow*, 07, 1997, pp. 880-906 (with J.E. Flaherty and M.S. Shephard).

“Exact representations on artificial interfaces and applications in mechanics”, *Applied Mechanics Reviews*, 52, 1999, pp. 333-349.

“Recent Advances in the DtN FE Method”, *Archives of Computational Methods in Engineering*, 06, 1999, pp. 71-116.

“High-Order Non-Reflecting Boundary Conditions Without High-Order Derivatives”, *J. Computational Physics*, 170, 2001, pp. 849-870.

“Analysis of Pulled Axisymmetric Membranes with Wrinkling”, *Int. J. Solids & Structures*, 39, 2002, pp. 1259-1274 (with A. Libai).

“An Adaptive Finite Element Framework for Fatigue Crack Propagation”, *Int. J. Numerical Methods in Engineering*, 54, 2002, pp. 111-135 (with R. Zusman).

“Optimal Modal Reduction of Vibrating Substructures”, *Int. J. Numerical Methods in Engineering*, 57, 2003, pp. 341-369 (with P. Barbone and I. Patlashenko).

Books

Numerical Methods for Problems in Infinite Domains, Elsevier Science Publishers, 1992

Advances in the Mechanics of Plates and Shells, Ed. (with D. Durban and J.G. Simmonds), Kluwer Academic Publishers, 2001

A Celebration of Mathematical Modeling; The Joseph B. Keller Anniversary Volume, Ed. (with M. Grote and G. Papanicolaou), Kluwer Academic Publishers, 2004

Member of Journal Editorial Board

Wave Motion (WM) (associate editor)

J. Computational Acoustics (JCA) (associate editor)

Int. J. Numerical Methods in Engineering (IJNME)

Int. J. Numerical Methods for Heat and Fluid Flow (NMHFF)

J. Multiscale Computational Engineering (JMCE)