



## **Professor Mahmood Jabareen**

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Structural Engineering and Construction Management  
Faculty of Civil and Environmental Engineering  
Technion, Haifa, Israel

### **Research Interests:**

Mechanics of reinforced concrete, Computational mechanics: Finite element technology; Cosserat theories; Stability of thin structures, Mechanics of soft biological tissues

### **Education:**

2005, Ph.D. Faculty of Civil and Environmental Engineering, Technion - Israel Institute of Technology, Haifa, Israel. Thesis: Static and Dynamic Stability of Imperfect Conical Shell.

2001, M. Sc. Faculty of Civil and Environmental Engineering, Technion - Israel Institute of Technology, Haifa, Israel, Cum Laude. Thesis: Membrane Behavior of a Cracked Reinforced Concrete Specimen Subjected to Uniaxial Tension.

1997, B. Sc. Faculty of Civil Engineering, Technion - Israel Institute of Technology, Haifa, Israel, Cum Laude.

### **Academic Appointments:**

Mar. 2009 - Present Senior lecturer, Faculty of Civil and Environmental Engineering, Technion - Israel Institute of Technology, Haifa, Israel  
Mar. 2007 - Feb. 2009 Post doctoral researcher, Faculty of Mechanical Engineering, ETH - Swiss Federal Institute of Technology, Zurich, Switzerland  
Aug. 2005 - Feb. 2007 Post doctoral researcher, Faculty of Mechanical Engineering, Technion - Israel Institute of Technology, Haifa, Israel  
1996 - 2004 Teaching assistant, Faculty of Civil and Environmental Engineering, Technion - Israel Institute of Technology, Haifa, Israel

### **Selected Publications:**

1. **Jabareen M.**, Sheinman I. (2009) 'Dynamic buckling of a beam on a nonlinear elastic foundation under step loading', *Journal of Mechanics of Materials and Structures (JOMMS)*, Vol. 4(7-8), pp. 1365 - 1373.
2. **Jabareen, M.**, and Sheinman, I., (2009) 'Elastic Stability of Imperfect Stiffened Conical Shells'. *International Journal of Solids and Structures*, Vol. 46, pp. 2111 - 2125.
3. **Jabareen, M.**, (2009) 'Rigorous Buckling of Laminated Cylindrical Shells'. *Thin-Walled Structures*, Vol. 47, No. 2, pp. 233-240.
4. **Jabareen, M.**, and Rubin, M. B., (2007) 'Hyperelasticity and Physical Shear Buckling of a Block Predicted by the Cosserat Point Element Compared With Inelasticity and Hourglassing Predicted by Other Element Formulations'. *Computational Mechanics*, Vol. 40, No. 3, pp. 447 - 459.
5. **Jabareen, M.**, and Sheinman, I., (2007) 'Buckling and Sensitivity to Imperfection of Conical Shells Under Dynamic Step - Loading', *Journal of Applied Mechanics, Transaction of the ASME*, Vol. 74, pp. 74 - 80.
6. **Jabareen, M.**, and Sheinman, I., (2006) 'Post Bucking Analysis of Geometrically Imperfect Conical Shells', *Journal of Engineering Mechanics, ASCE*, Vol. 132, No. 12, pp. 1326 - 1334.
7. **Jabareen, M.**, and Sheinman, I., (2006) 'Effect of the Nonlinear Pre-Buckling State on the Bifurcation Point of Conical Shells', *International Journal of Solids and Structures*, Vol. 43, No. 7-8, pp. 2146-2159.
8. Sheinman, I., and **Jabareen, M.**, (2005) 'Post-Buckling of Laminated Cylindrical Shells in UVW and WF Formulations', *AIAA*, Vol. 43(5), pp. 1117-1123.
9. Eisenberger, M., and **Jabareen, M.**, (2001) 'Axisymmetric Vibrations of Circular and Annular Plates with Variable Thickness', *International Journal of Structural Stability and Dynamics*, Vol. 1, pp. 195-206.
10. **Jabareen, M.**, and Eisenberger, M., (2001) 'Free Vibrations of Non-Homogeneous Circular and Annular Membranes', *Journal of Sound and Vibrations*, Vol. 240, pp. 409-429.