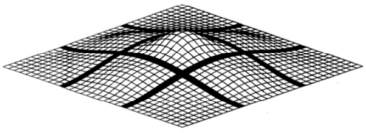


Fig. 2. First eigenmode, $f_1 = 92.20$ Hz

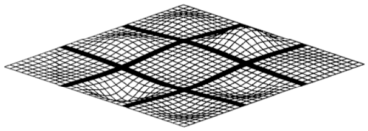


Fig. 3. Second eigenmode, $f_2 = 161.71$ Hz

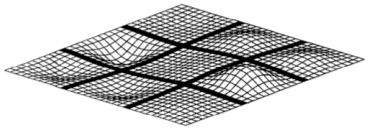


Fig. 4. Third eigenmode, $f_3 = 161.71$ Hz

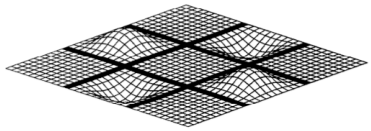
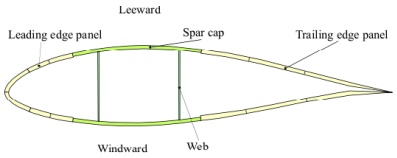


Fig. 5. Fourth eigenmode, $f_4 = 175.03$ Hz



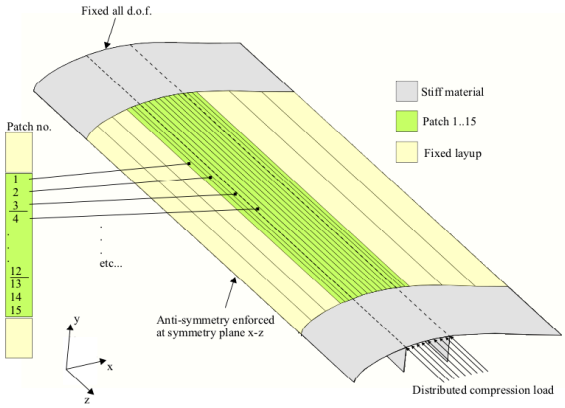


Figure 6: The NACA $63_4 - 421$ airfoil section studied together with the model of the test section. The design domain consists of the 15 patches in the spar cap. Anti-symmetric boundary conditions are assumed.

Professor Erik Lund

The middle image above is from: A.P. Seyranian, E. Lund, and N. Olhoff. Multiple eigenvalues in structural optimization problems. Structural Optimization, 8:207–227, 1994.

The right-most image above is from: Erik Lund, Lennart Kuhlmeier and Jan Stegmann, “Buckling Optimization of Laminated Hybrid Composite Shell Structures Using Discrete Material Optimization”, 6th World Congress on Structural and Multidisciplinary Optimization Rio de Janeiro, 30 May - 03 June 2005, Brazil

See:
https://scholar.google.com/citations?user=1TusNToAAAAJ&hl=en
https://www.researchgate.net/profile/Erik_Lund2

Department of Materials and Production, Aalborg University, Denmark

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