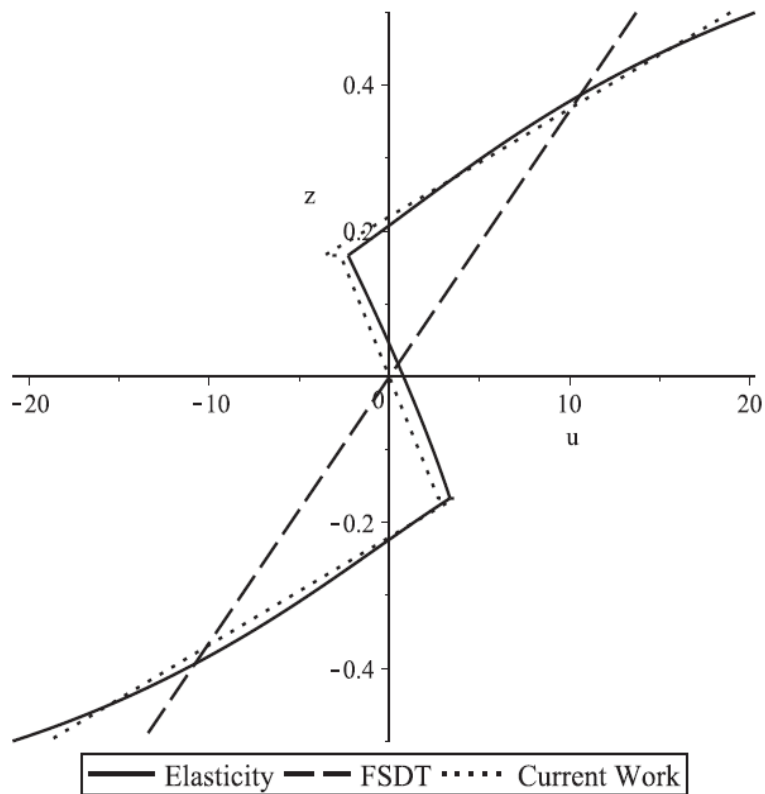


Enhanced plate FE

Problem: Both the analytical and the numerical modeling of plates made of layers of different and anisotropic materials is a non trivial issue also nowadays despite their use in several engineering fields need more and more accurate and efficient model.

A promising analytical model was recently proposed and the comparison with available analytical solutions was performed. The natural development of the modeling procedure is the development of the corresponding Finite Element.

Objective: Develop the FE of an available enhanced mixed plate model.



Type:
Numerical

Prerequisites:

- Knowledge of MATLAB
- Optional knowledge of numerical and symbolic software calculus (e.g. MATLAB, MAPLE, MATHEMATICA)

References

F. Auricchio, G. Balduzzi, M.J. Khoshgoftar, G.R. Rahimi, R. Sacco.
Enhanced modeling approach for multilayer anisotropic plates based on dimension reduction method and Hellinger–Reissner principle.
Composite Structures, 118 (2014) 622-633.

Thesis proposal