

Figure 4. Clamped-free beam-like structure with one shunted piezoelectric patch: Finite element model into Nastran code.

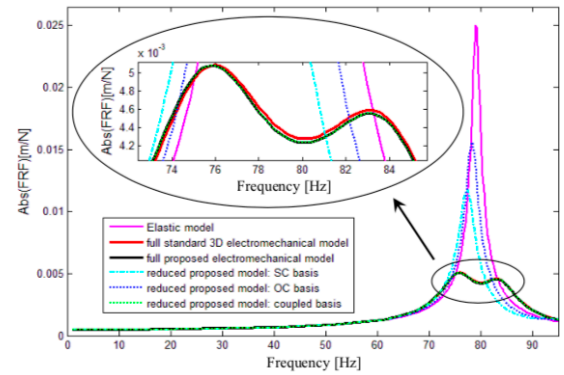


Figure 5. Transfer function between point force and beam response using a resonant shunt circuit and for patch thickness equal to 1 mm.

Professor Walid Larbi

The middle and right-most images above are from: W. Larbi, L. Pereira da Silva, J.-F. Deü, An efficient FE approach for attenuation of acoustic radiation of thin structures by using passive shunted piezoelectric systems, *Applied Acoustics*, 128, 3-13, 2017.

See:

<http://www.lmssc.cnam.fr/en/equipe/walid-larbi>

https://www.researchgate.net/profile/Walid_Larbi

<https://scholar.google.com/citations?user=CpxxyMAAAJ&hl=en>

Structural Mechanics and Coupled System Laboratory, National Conservatory of Arts and Crafts, Paris, France

Selected Publications:

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L. Pereira da Silva, W. Larbi, J.-F. Deü, Topology optimization of shunted piezoelectric elements for structural vibration reduction, *Journal of Intelligent Material Systems and Structures*, 26 (10), 1219-1235, 2015.

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W. Larbi, Numerical modeling of sound and vibration reduction using viscoelastic materials and shunted piezoelectric patches, *Computers & Structures*, 232, 105822 (10 pages), 2020.