

References

Marconi, J., Tiso, P., & Braghin, F. (2020). A nonlinear reduced order model with parametrized shape defects. *Computer Methods in Applied Mechanics and Engineering*, 360, 112785.

<https://doi.org/10.1016/j.cma.2019.112785>

Marconi, J., Tiso, P., Quadrelli, D. E., & Braghin, F. (2021). A higher-order parametric nonlinear reduced-order model for imperfect structures using Neumann expansion. *Nonlinear Dynamics*.

<https://doi.org/10.1007/s11071-021-06496-y>

Note 1

Apart from the functions included in this folder, the following additional methods have been added in “./src/Elements/MechanicalElements/CE/@ContinuumElements”:

- DpROM_version.m
- DpROM_mass.m
- DpROM_stiffness_defect_derivative

Notes 2

This package supports tensor computations in Julia language (as an option). In order to use it, Julia must be installed in the system and Mex.jl (<https://github.com/byuflowlab/Mex.jl.git>) must be properly set in order to call Julia from Matlab.

DpROM.jl calls the following modules:

- Dates
- LinearAlgebra
- SparseArrays
- TensorOperations (<https://doi.org/10.5281/zenodo.3245497>)