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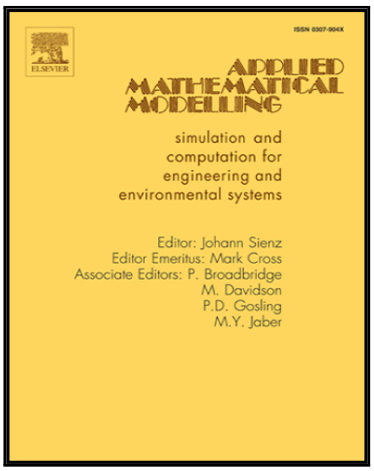

Thermal and thermomechanical solution of laminated composite beam based on a variables separation for arbitrary volume heat source locations

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Highlights

- A explicit thermal solution for laminated and sandwich beams with arbitrary heat source location is developed.
- The temperature field is approximated as a sum of three 1D separated functions.
- An iterative process is carried out in which three 1D problems are solved successively at each iteration
- Thermo-Mechanical tests for laminated and sandwich beams show the good capability of this method.

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