

## Accepted Manuscript

Exact frequency response of two-node coupled bending-torsional beam element with attachments

Andrea Burlon, Giuseppe Failla, Felice Arena

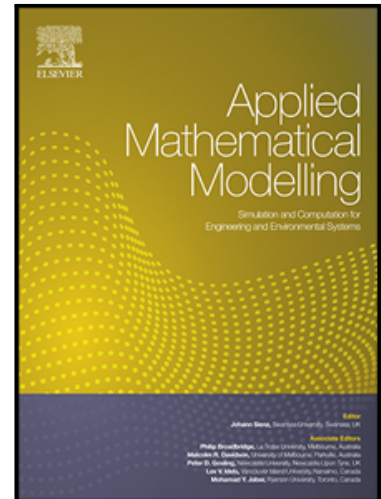
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**Highlights**

- Coupled bending-torsional dynamics of beams with dampers/masses is addressed.
- Exact analytical frequency response is built for any harmonic point/polynomial loads.
- Exact two-node  $6 \times 6$  dynamic stiffness matrix and  $6 \times 1$  load vector are built in closed form.
- Dynamic stiffness matrix and load vector hold same size for any number of dampers/masses and loads.
- Modal frequency responses and modal impulse responses are derived by complex modal analysis.

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