Asymptotic analysis of high-frequency modulation in periodic systems. Analytical study of discrete and continuous structures.

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Highlights

- Theoretical/analytical up-scaling of high-frequency behaviour of periodic structures
- Multi-cells asymptotic method for reticulated structures coupling tension and bending
- Derivation of new pseudo-beam models in full dynamic regime (local and global)
- Evidence of high-frequency modulation driven by a fourth degree differential operator
- Results linked to Bloch waves and the standard homogenization are confirmed numerically