

# Stabilized finite element method for non-homogeneous Timoshenko beam.

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## Abstract

This work deals with the finite element approximation of the Timoshenko system. We prove the existence and the uniqueness of the continuous and the discrete problems. We propose a stabilized finite element method for the corresponding mixed formulation. Numerical tests are included.

**Keywords:** Finite element approximation, Stabilization, Timoshenko beams

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## References

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