

# Existence of solutions of fourth order nonlinear and nonlocal boundary problems

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In this talk we study the existence of positive solutions of a fourth-order nonlinear problem coupled to nonlocal boundary conditions. The results follow from the fixed-point theory and the construction of the related Green function of the corresponding linear problem coupled to local or nonlocal boundary conditions.

The results have been published in the following reference:

Cabada, Alberto; Jebari, Rochdi; López-Somoza, Lucía, *Existence results for a fourth order problem with functional perturbed clamped beam boundary conditions*. Math. Slovaca 74 (2024), 4, 895–916.