

## EXISTENCE OF SOLUTION FOR BIHARMONIC SYSTEMS WITH INDEFINITE WEIGHTS

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*Abstract.* In this article we deal with the existence questions to the nonlinear biharmonic systems. Using theory of monotone operators, we show the existence of a unique weak solution to the weighted biharmonic systems. We also show the existence of a positive solution to weighted biharmonic systems in the unit ball in  $\mathbb{R}^n$ , using Leray Schauder fixed point theorem. In this study we allow sign-changing weights.

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