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EXISTENCE OF NONTRIVIAL DISCRETE WEAK SOLUTIONS WITH DOUBLY ASYMPTOTIC BOUNDARY VALUE PROBLEMS

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Abstract. This manuscript is dedicated to the study of the existence of nontrivial homoclinic solutions for a class of non-homogeneous $p(.)$-Laplacian problem in $\mathbb{Z}^n (n \geq 2)$. Using the critical point theory combined with variational techniques, mainly based on the mountain-pass lemma, we obtain the needed result.

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