ON A CLASS OF KIRCHHOFF–CHOQUARD EQUATIONS INVOLVING VARIABLE-ORDER FRACTIONAL $p(\,\cdot\,)$-LAPLACIAN AND WITHOUT AMBROSETTI–RABINOWITZ TYPE CONDITION

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Abstract. In this article, we study the existence of weak solutions and of ground state solutions using the Nehari manifold approach, and existence of infinitely many solutions using the fountain theorem and the dual fountain theorem for a class of doubly nonlocal Kirchhoff–Choquard type equations involving the variable-order fractional $p(\,\cdot\,)$-Laplacian operator. Here the nonlinearity does not satisfy the well known Ambrosetti–Rabinowitz type condition.