

## ENTIRE SOLUTIONS FOR CRITICAL $p$ -FRACTIONAL HARDY SCHRÖDINGER KIRCHHOFF EQUATIONS

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**Abstract:** Existence theorems of nonnegative entire solutions of stationary critical  $p$ -fractional Hardy Schrödinger Kirchhoff equations are presented in this paper. The equations we treat deal with Hardy terms and critical nonlinearities and the main theorems extend several recent results on the topic. The paper contains also some open problems.

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**Key words:** Stationary Kirchhoff problems, nonlocal  $p$ -Laplacian operators, Hardy coefficients, critical exponents.