

Fractional Schrödinger-Poisson system with low order term

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Abstract

In this paper, we consider the following fractional Schrödinger-Poisson system:
$$\begin{cases} (-\Delta)^s u + u + \lambda K(x)|\phi u|^{p-2}u + b(x)|u|^2u & \text{in } \mathbb{R}^3, \\ (-\Delta)^t \phi = K(x)u^2 & \text{in } \mathbb{R}^3, \end{cases}$$
 where $s, t \in (0, 1)$, $\lambda > 0$.

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