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**On a class of Choquard equations involving Kirchhoff type nonlocal term**

**Abstract**

In this talk, we study a class of Choquard equations involving Kirchhoff type nonlocal term

$$-\left(a + b \int_{\mathbb{R}^3} |\nabla u|^2 dx\right) \Delta u - \mu u = (I_\alpha * |u|^p) |u|^{p-2} u, \quad \text{in } \mathbb{R}^3,$$

where  $a > 0$ ,  $b > 0$ ,  $\mu \in \mathbb{R}$ ,  $N \geq 1$ ,  $\alpha \in (0, N)$ ,  $\frac{N+\alpha}{N} < p < \frac{N+\alpha}{(N-2)}$ ,  $I_\alpha$  is the Riesz potential. When  $p$  belongs to different ranges, we obtain the threshold values separating the existence and nonexistence of the normalized solutions. The behaviors of the Lagrange multipliers and the energies corresponding to the constrained critical points were also investigated.