



北京理工大学

数学与统计学院学术报告

Solutions with prescribed mass for the p -Laplacian Schrödinger-Poisson systems with critical growth

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时间：2025 年 10 月 28 日（周二下午）17:00—18:00

地点：文萃楼D座703-704会议室

报告人简介：中央民族大学理学院教授、研究生导师，美国数学评论评论员，德国数学文摘评论员，中央民族大学应用数学研究所所长。近年来，主要研究非局部椭圆型微分方程解的存在性，多解性，集中性以及规范化解的存在性等问题，已在国内外数学期刊，如Bull. Math. Sci., Manuscript. Math., Calc. Var. PDE, J. Geometric Analysis, J. Differential Equations, Ann. Mat. Pura Appl., Nonlinearity, SciChinaMath等期刊上发表50多篇科研论文，被SCI引用2000多次。主持和参与多项国家自然科学基金项目。

摘要：In this talk, we mainly report some existence, and multiplicity results on the normalized solutions for the p -Laplacian Schrodinger-Poisson systems with Sobolev critical exponents, and perturbed by the L^p -subcritical, L^p -critical and L^p -supercritical perturbations, respectively. The arguments are based on the concentration-compactness principle, Pohozaev manifold, energy estimation, and the constrained variational methods. The Sobolev subcritical case is also considered.