



偏微分方程及其应用中心

学术报告

报告题目: On uniqueness of multi-bubble blow-up solutions and multi-solitons to L^2 -critical NLS

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地点: 数学院南楼 613

摘要: We are concerned with the focusing L^2 -critical nonlinear Schrodinger equations. The uniqueness is proved for a large energy class of multi-bubble blow-up solutions, which converge to a sum of K pseudo-conformal blow-up solutions particularly with the low rate $(T-t)^{0+}$. Moreover, we also prove the uniqueness in the energy class of multi-solitons which converge to a sum of K solitary waves with convergence rate $(1/t)^{2+}$. The uniqueness class is further enlarged to contain the multi-solitons with even lower convergence rate $(1/t)^{1/2+}$ in the pseudo-conformal space. This talk is based on a joint work with Prof. Cao Daomin and Prof. Zhang Deng.