

中国科学院数学与系统科学研究院

量子论与信息论

学术报告

报告题目: The Quantum Perron-Frobenius Theorem

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地 点: 腾讯会议 210-638-845

摘 要: We establish the quantum Perron-Frobenius theorem on quantum symmetries. We characterize the structure of the Perron-Frobenius eigenvector space using quantum Fourier analysis (in the sense of picture language). We generalize the existence and uniqueness results for the Perron-Frobenius eigenvector on Banach ordered spaces, from the finite dimensional case to infinite dimensions. We also describe the relation between these mathematical results and quantum information theory, especially to the Knill-Laflamme theorem.