



复旦大学数学科学学院 数学综合报告会

报告题目: Some recent results related to the prescribed fractional Q -curvatures problems

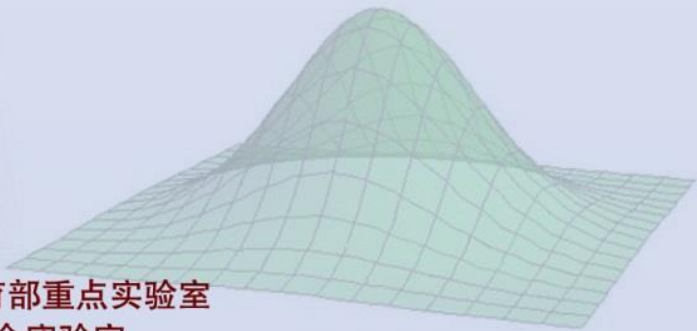
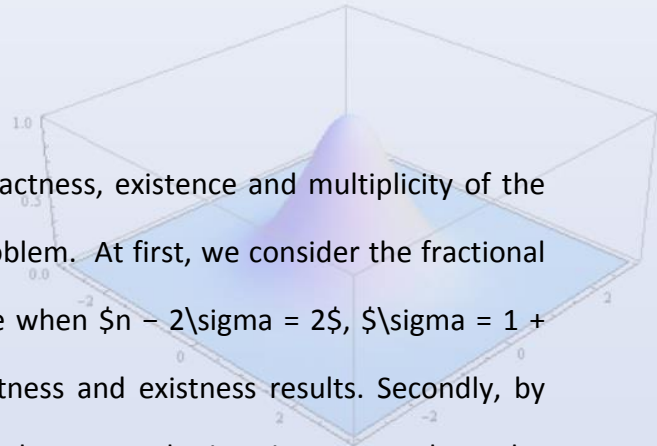
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时间: 2025-03-20 星期四 10:00-11:00

地点: 光华东主楼1801

报告摘要:

In this talk, I present some results about the compactness, existence and multiplicity of the solutions to the prescribing fractional Q -curvature problem. At first, we consider the fractional order is 2σ on n -dimensional standard sphere when $n - 2\sigma = 2$, $\sigma = 1 + m/2$, $m \in \mathbb{N}_+$, we obtain some compactness and existness results. Secondly, by combining critical points at infinity approach with Morse theory we obtain existence results under suitable pinching conditions. Thirdly, we obtain some results on the density and multiplicity of positive solutions to the prescribed fractional Q -curvatures problems for $\sigma \in (0, 1)$ and $\sigma \in (1, \frac{n}{2})$ is an integer. This is a joint work with Dr. Yan Li, Heming Wang and Ning Zhou.



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