



复旦大学数学科学学院 数学综合报告会

报告题目: A New Type of Hilbert Modules

报告人: Prof. Harald Upmeyer (德国马尔堡大学)

时间: 2025-11-24 星期一 16:00-17:00

地点: 光华楼东主楼1801

报告摘要:

Classically, Hilbert modules are considered for (multivariable) holomorphic functions. In this talk we introduce a new type of Hilbert modules which do not consist of holomorphic functions but instead involve cohomology spaces of differential forms of higher order. We give examples from representation theory (discrete series) which show that the holomorphic case gives only a small part of the theory, whereas the cohomology approach yields a much more complete picture. We also show that many fundamental problems can be addressed for this new type of Hilbert modules.

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