



复旦大学数学科学学院

数学综合报告会

报告题目：The Chow t-structure and calculations in motivic stable homotopy theory

报告人：孔嘉（Institute for Advanced Study, Princeton）

时间：2022-01-14 星期五 10:20—11:00

地点：复旦大学光华楼东主楼2201室、腾讯会议755107231

报告摘要：

I will talk about joint work with Tom Bachmann, Guozhen Wang and Zhouli Xu on the Chow t-structure on the motivic stable homotopy category over a general base field. We identify the heart of this t-structure and show the algebraicity of a certain motivic module category. Our work generalizes the work of Gheorghe--Wang--Xu; it leads to computational applications in the classical and motivic Adams spectral sequences.

Time permitting, I will also talk about the motivic slice computation of the motivic 'image-of-j' spectrum defined by Bachmann--Hopkins. The comparison between the motivic slice spectral sequence and the motivic Adams spectral sequence parallels the classical Adams and Adams--Novikov spectral sequences. The slice computation is joint with Eva Belmont and Dan Isaksen.

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