



華東師範大學 | 数学科学学院
School of Mathematical Sciences, East China Normal University

2024 年 ECNU 代数几何研讨会 (11.29) 程序册

华东师范大学闵行校区, 上海

2024.11.28-2024.11.29

会议报告人 (按姓氏拼音排序)

丁聪 (深圳大学)

李展 (南方科技大学)

组织委员会 (按姓氏拼音排序)

杜荣 吕鑫 陆俊 孟晟 戚鲁 谈胜利 张通

日程安排

11 月 29 日

地址:华东师范大学（闵行）数学科学学院数学楼 102

时间	会议内容	主持人
上午	自由讨论	
14: 00-15: 00	丁 聪: On equivariant compactification of some unipotent algebraic groups	吕鑫
15: 00-15: 30	中场休息	
15: 30-16: 30	李 展: Automorphism Groups and Homogeneous Fibrations on Algebraic Varieties	吕鑫
17: 30-19:00	晚宴	

报告摘要

On equivariant compactification of some unipotent algebraic groups

丁 聪
深圳大学

Abstract: Unlike the reductive group compactifications (e.g. toric varieties), equivariant compactification of unipotent algebraic groups is less known. In this talk, I will report some recent progress on this topic, especially for vector groups and Heisenberg groups. This is based on joint works in progress with Zhijun Luo (IBS, CCG).

Automorphism Groups and Homogeneous Fibrations on Algebraic Varieties

李 展
南方科技大学

Abstract: Algebraic varieties with nef anticanonical bundles exhibit homogeneous structures for their Albanese morphisms and maximal rationally chain-connected (MRC) fibrations. In this talk, we examine the relationship between automorphism groups and these homogeneous structures. Besides, a classical theorem by Nishi and Matsumura establishes a natural group homomorphism associated with the Albanese morphism, which induces the Chevalley decomposition of the automorphism group up to an isogeny. We extend this perspective by proving an analogous result for the MRC fibrations. This is joint work with Jinsong Xu.