

复旦大学建校 121 周年校庆学术报告会

Time: Thursday, May 28th, 13:40-15:30

Venue: SCMS 102

Chair: Weixiao Shen (沈维孝)

Lecture 1 13:40-14:10 **Speaker:** Ruxuan Zhang(张儒轩)

Title: 超凯勒簇的导出 Torelli 问题

Abstract: 本报告首先介绍超凯勒簇以及导出范畴的基本概念，并阐述研究导出 Torelli 问题的动机。随后，报告人将汇报近期工作，包括一类超凯勒簇上的 D-等价猜想以及 K3 曲面上向量丛模空间之间的导出等价关系。最后，报告人将展望未来的问题和可能的研究方向，介绍非射影复流形导出范畴的相关问题。

Lecture 2 14:20-14:50 **Speaker:** Dongchen Li (李东宸)

Title: Abundance of families of diffeomorphisms displaying infinitely many sinks for an open set of parameter values

Abstract: Let M be a smooth manifold of dimension at least 3. For any $2 \leq r < \infty$ and any integer $d \geq 0$, let $\{f_t\}$ be a d -parameter C^r family of diffeomorphisms of M such that, for some parameter value t , f_t has a homoclinic tangency to a weakly dissipative saddle (namely, an orbit of non-transverse intersection between the stable and unstable manifolds

of this saddle). We show that $\{f_t\}$ lies in the C^r -closure of an open set U in the space of C^r families such that generic families in U display infinitely many sinks for an open set of parameter values. This is a joint work with Dmitry Turaev.

Lecture 3 15:00-15:30 Speaker: Yupeng Wang (王宇鹏)

Title: Convergence of Galois representations over de Rham period ring

Abstract: A representation of Galois representation over Fontaine's de Rham period ring is called convergent if it extends to a Galois equivariant vector bundle on a neighborhood of Fargues-Fontaine curve at infinity that has the compatible Galois cohomology. We will give a sufficient condition for the convergence of such a representation by using the theory of p -adic differential equations.