

## スーパーグローバルコース数学特別講演会

グラスゴー大学の Rachael Boyd 先生の講演が下記要領にて行われます。

日時：2025年1月20日（月）～22日（水）

各 10:30～12:00

場所：理学研究科3号館 127室

タイトル：Diffeomorphisms of 3-manifolds

概要：

This mini-course consists of 3 lectures, where I will introduce the basic theory required to study diffeomorphisms of 3-manifolds, from a topological perspective.

First I will introduce the classifying space  $B \text{Diff}(M)$  for  $M$  a 3-manifold, and  $\text{Diff}(M)$  the diffeomorphism group of  $M$ . I will survey known results on the homotopy type, and introduce tools including various decompositions of  $M$ , such as the prime decomposition, Jaco—Shalen Johansson decomposition, and geometric decomposition. I will survey Thurston's geometrisation conjecture (proved by Perelman) and known results on the diffeomorphism groups of certain geometric manifolds (in particular Seifert-fibered manifolds). I will introduce tools such as helpful fiber sequences, locally retractile group actions, and topological posets.

This mini-course will contain background theory for my research talk during the topology conference, where I will talk about joint work with Bregman and Steinebrunner.

- ・ 本学の学生は申込不要です。
- ・ 本講演は京都大学のスーパーグローバル教育プログラム、スーパーグローバルコース（数学分野）の企画講演です。当コースについての詳細は <https://www.math.kyoto-u.ac.jp/ja/ktgu/ktgu> をご覧ください。



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