Stefan Schreieder Summer term 2025

## Working Seminar

Tuesday 14:15-15:45 in F 107

This seminar consists of two parts. In May, Olivier Benoist (Mercator Fellow of the RTG 2965) will give a lecture series on real algebraic geometry and Hodge theory. This is part of the research training group between Hannover and Berlin.

In April, June and July, the seminar will discuss some recent preprints. Each speaker should pick a preprint (written by other authors) that is of interest to (some parts of) our group. The goal is to understand the preprint and to present it to our group such that non-specialists can follow the talk.

1. Distribution of talks

Date: 08.04.2025

2. Retract rational varieties are uniformly retract rational (after J. Banecki)

Speaker: St. Schreieder

Preprint: https://arxiv.org/abs/2411.17892

Date: 15.04.2025

3. Cubic fourfolds of discrimant 24 and rationality (after B. Hassett)

Speaker: J. Lange

Preprint: https://arxiv.org/abs/2411.04222

Date: 22.04.2025

4. Nowhere vanishing 1-forms on varieties admitting a good minimal model (after B. Church)

Speaker: S. Pietig

Perprint: https://arxiv.org/abs/2410.22753

Date: 29.04.2025

5. Real algebraic geometry and Hodge theory 1+2 (Benoist)

Date: 06.05.2025

6. Real algebraic geometry and Hodge theory 3+4 (Benoist)

Date: 13.05.2025

7. Real algebraic geometry and Hodge theory 5+6 (Benoist)

Date: 20.05.2025

8. Real algebraic geometry and Hodge theory 7+8 (Benoist)

Date: 27.05.2025

## 9. The period-index conjecture for abelian threefolds and Donaldson-Thomas theory (after J. Hotchkiss and A. Perry)

Speaker: D. Mattei

Preprint: https://arxiv.org/abs/2405.03315

Date: 03.06.2025

10. **TBA** (Cheng)

Date: 24.06.2025

11. **TBA** (Suzuki)

Date: 01.07.2025

12. **TBA** (Friesen)

Date: 08.07.2025

13. **TBA** (Muller)

Date: 15.07.2025