

Preface

This volume constitutes the proceedings of the conference *Model Theory and Groups*, held at the University of Münster, Germany, on 25–29 September 2023, in honour of the 60th birthday of Professor Katrin Tent. The conference brought together invited speakers and participants from a wide range of backgrounds spanning model theory and group theory, providing a vibrant platform for interactions among leading researchers across both fields.

More than 60 participants attended, reflecting the breadth of international interest in the themes of the meeting. The choice of topics was particularly fitting: it mirrors Katrin's own research trajectory, which has consistently spanned the boundary between model theory and group theory. Her work has been instrumental in building deep and lasting connections between the two fields, in particular in forging new links between model theory and the theory of buildings in combinatorial and geometric group theory. The conference, in its scope and its spirit of interdisciplinary exchange, was in every sense a natural expression of Katrin's mathematical vision and diversity in research activity.

The themes of the conference reflect the remarkable range of Katrin's research interests over the course of her career and the resounding impact she had on them. Her sustained engagement with both model theory and group theory has generated new developments across a variety of subfields and has inspired fruitful interactions between communities that do not always find natural common ground. The conference sought to continue and extend this tradition, with sessions and discussions that crossed disciplinary lines and brought together perspectives that enriched all participants.

As former doctoral students of Katrin, we are particularly well placed to appreciate what this conference represents. Katrin's approach to mathematics – her intellectual openness, and her ability to see connections across fields – has shaped not only her own research, but also the development of a thriving model theory group in Münster, one that is now among the most active and internationally recognised in the field. The many postdoctoral researchers and collaborators who have worked alongside Katrin over the years bear witness to her profound and lasting impact on the community. Her influence is felt not only through her publications but through the careers she has shaped and the mathematical culture she has helped to create.

During the editorial process of this proceedings volume, we received the deeply saddening news of the passing of our dear colleague and greatly admired researcher, Professor Zoé Chatzidakis. Zoé was a distinguished figure in model theory, widely respected and beloved by the community. Her loss is felt profoundly by all who had

the privilege of knowing her and her work. We dedicate this volume in part to her memory.

The conference was generously supported by the Cluster of Excellence Mathematics Münster, the CRC 1442 Geometry: Deformations and Rigidity, the ANR-DFG Project GeoMod and the Association for Symbolic Logic. It was organised by Professors Martin Hils and Franziska Jahnke, both from the University of Münster, and the two editors. We are grateful to the University of Münster for hosting the event and for providing an ideal setting for this celebration of Katrin's mathematics. We also thank all participants, speakers, and contributors to this volume for making both the conference and these proceedings a worthy tribute. Special thanks go to the anonymous referees too, for their diligent work in reviewing the papers.

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Group photo taken at the conference.