

DMRCP Fellow Introduction

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- MA in mathematics, University of Vienna.
- PhD in set theory, Kurt-Gödel-Research Center, University of Vienna.
- Marie-Curie-Fellowship at the Department of Philosophy, University of Konstanz.
- Assistant Professor (Juniorprofessur) at the Department of Philosophy, Konstanz.

Idea: Set Theory underwent a fundamental change in the 1960s with the use of model-building techniques, in particular forcing.

Change in the practice of set theory: methods, research objects, conceptions, research questions etc.; disciplinary and institutional status, research culture, philosophical and historical reflection.

PostDocs: Neil Barton, Daniel Kuby PhD student: Deborah Kant

Planned monograph: Conceptual change in mathematics - The case of set theory

Working title: The role of examples in mathematical reasoning

Idea: Abstraction and generalisation are well investigated as a very powerful tool in mathematical reasoning. But their starting point such as examples, instances etc are much less investigated. This project wants to do this from the point of:

- concepts: concept formation and naturalness via instances
- explanatoriness: example-based reasoning (pro: Pease et al; contra: Lange)
- scientific discovery: heuristic strategies for problem solving
- creativity/aesthetics/others: epistemic criteria?