



#### Workshop

# "Definability in Number Theory and Arithmetic Geometry"

October 20 - 24, 2025

organized by

Franziska Jahnke, Jennifer Park, Florian Pop, Sasha Shlapentokh, Jakob Stix

Time measurement: CEST

#### • Monday, October 20

08:30 - 09:00	Arrival and Self-Registration
09:00 - 09:05	Welcome by HIM Director Stefan Müller
09:30 - 10:30	Philipp Hieronymi A strong version of Cobham's theorem
10:30 - 11:15	Coffee break
11:15 - 12:15	Arno Fehm Linear equations with valuation constraints
12:15 - 14:30	Lunch break
14:30 - 15:30	Raf Cluckers Finiteness and Diophantine results in Hensel minimal structures
15:30 - 16:15	Coffee break
16:15 - 17:15	Margaret Bilu Euler products in arithmetic and geometry
from 17:15 on	$Get ext{-}Together$

# • Tuesday, October 21

09:30 - 10:30	Carlo Pagano Hilbert tenth problem for finitely generated rings
10:30 - 11:15	Coffee break
11:15 - 12:15	Ari Shnidman Rank stability in quadratic extensions and Hilbert's 10th problem
12:15 - 14:30	Lunch break
14:30 - 15:30	Arix Eggink Diophantine Maps and Hilbert's Tenth Problem for some Noncommutative rings
15:30 - 16:15	Coffee break
16:15 - 17:15	Philip Dittmann Hilbert's 10th Problem in power series rings with parameters

## • Wednesday, October 22

09:00 - 10:00	Marta Pieropan Counting Campana points of bounded height
10:00 - 10:30	Coffee break
10:30 - 11:30	Floris Vermeulen On Serre's thin set conjecture
11:30 - 11:45	Break
11:45 - 12:45	<b>Jochen Koenigsmann</b> Fields with the absolute Galois group of $\mathbb{Q}$

## • Thursday, October 23

09:30 - 10:30	Vincenzo Mantova Updates on the exponential-algebraic closedness
10:30 - 11:15	Coffee break
11:15 - 12:15	Franz-Viktor Kuhlmann On certain definable coarsenings of valuation rings and their applications
12:15 - 14:30	Lunch break
14:30 - 15:30	Konstantinos Kartas Nonstandard methods in almost mathematics
15:30 - 16:15	Coffee break
16:15 - 17:15	Nicolas Daans Existential first-order definitions of valuations in function fields

# • Friday, October 24

09:30 - 10:30	Julian Demeio The Grunwald Problem for solvable groups
10:30 - 11:15	Coffee break
11:15 - 12:15	<b>Tingxiang Zou</b> Pairs and stable completions of difference varieties
12:15 - 14:00	Lunch break
14:00 - 15:00	Tom Scanlon The logical complexity of finitely generated algebras