Leeds Computability Days 2024 University of Leeds School of Mathematics Leeds, UK

02 - 05 July 2024

Tuesday, 02 July 2024

Lecture Theatre D, Chemistry Building, University of Leeds

Before 10:00am: Coffee available!

10:00am – 10:50am: Keita Yokoyama (Tohoku University)

Proof interpretations based on low basis type theorems

and forcing

10:50am - 11:10am: Morning break!

11:10am – 12:00pm: Katarzyna Kowalik (University of Würzburg)

Computable ultrapowers, forcing and proof size

12:00pm - 2:00pm: Lunch!

2:00pm - 2:50pm: Mathieu Hoyrup (University of Lorraine / LORIA)

Computable presentations of topological spaces

2:50pm – 3:20pm: Afternoon break!

3:20pm – 4:10pm: Sam Sanders (Ruhr University Bochum)

The Big, Bigger, and Biggest Five of reverse mathematics

4:10pm – 5:00pm: Rupert Hölzl (Bundeswehr University Munich)

Benign approximations, superspeedability, and randomness

Wednesday, 03 July 2024

MALL (Level 8), School of Mathematics, University of Leeds

Before 10:00am: Coffee available!

10:00am - 10:50am: Dino Rossegger (TU Wien)

Learning equivalence relations on Polish spaces

10:50am - 11:10am: Morning break!

11:10am – 12:00pm: David Fernández-Duque (University of Barcelona)

Provable well-orders and hyperarithmetical soundness

12:00pm - 2:00pm: Lunch!

2:00pm – 2:50pm: Johanna Franklin (Hofstra University)

Highness in the reticent sense

2:50pm - 3:20pm: Afternoon break!

3:20pm – 4:10pm: David Gonzalez (University of California, Berkeley)

 $Hybrid\ maximal\ filter\ spaces$

4:30 pm - 6:00 pm Reception!

Thursday, 04 July 2024

MALL (Level 8), School of Mathematics, University of Leeds

Before 10:00am: Coffee available!

10:00am – 10:50am: Patrick Uftring (University of Würzburg)

 $Weihrauch\ degrees\ without\ roots$

10:50am - 11:10am: Morning break!

11:10am – 12:00pm: Emanuele Frittaion (University of Leeds)

Games for Peano arithmetic and elementary descent recursion

12:00pm - 2:00pm: Lunch!

2:00pm – 2:50pm: Shuwei Wang (University of Leeds)

 Σ_1^1 -computability and realisability of a global well-ordering

2:50pm - 3:20pm: Afternoon break!

3:20pm – 4:10pm: Alice Vidrine (University of Wisconsin–Madison)

Some results on enumeration Weihrauch reduction

4:10pm – 5:00pm: Ellen Hammatt (Victoria University of Wellington)

Structures computable without delay

Friday, 05 July 2024

MALL (Level 8), School of Mathematics, University of Leeds

Before 10:00am: Coffee available!

10:00am – 10:25am: Heidi Benham (University of Connecticut) (online talk)

The Ginsburg-Sands theorem and computability theory

10:25am – 10:50am: Damir Dzhafarov (University of Connecticut) (online talk)

The strength of the Ginsburg-Sands theorem for T_1 spaces

10:50am - 11:10am: Morning break!

11:10am – 12:00pm: Dan Turetsky (Victoria University of Wellington)

The descriptive complexity of $\operatorname{high}_{\alpha}$

12:00pm - 2:00pm: Lunch!

2:00pm – 2:50pm: Arno Pauly (Swansea University)

More on the indivisibility of \mathbb{Q}

2:50pm – 3:20pm: Afternoon break!

3:20pm – 4:10pm: Yudai Suzuki (NIT, Okinawa College)

On some subtheories of Π_1^1 -CA₀