

Summer School on “Reverse Mathematics: New Paradigms”**of the Thematic Programme on “Reverse Mathematics”****July 28 - August 1, 2025****organized by****Juan Aguilera (TU Vienna), Linda Brown Westrick (Penn State U), Noam Greenberg (Victoria U of Wellington), Denis Hirschfeldt (U of Chicago)****• Monday, July 28th, 2025**09:00 – 10:00 **Registration and Welcome**10:00 – 11:00 **Ekaterina Fokina (TU Vienna)***Computable structure theory, Lecture 1*11:00 – 11:30 **Coffee Break**11:30 – 12:30 **Ekaterina Fokina (TU Vienna)***Computable structure theory, Lecture 2*12:40 – 14:30 **Lunch Break**14:30 – 15:30 **Damir Dzhafarov (U of Connecticut)***From topology to combinatorics, Lecture 1*15:30 – 15:50 **Coffee Break**15:50 – 16:50 **Ludovic Patey (CNRS, Paris)***Lowness and avoidance: a guide to separation, Lecture 1***• Tuesday, July 29th, 2025**10:00 – 11:00 **Ekaterina Fokina (TU Vienna)***Computable structure theory, Lecture 3*11:00 – 11:30 **Coffee Break**11:30 – 12:30 **Damir Dzhafarov (U of Connecticut)***From topology to combinatorics, Lecture 2*12:30 – 14:30 **Lunch Break**14:30 – 15:30 **Keita Yokoyama (Tohoku U)***Reverse mathematics for analysis: an introduction, Lecture 1*15:30 – 15:50 **Coffee Break**15:50 – 16:50 **Ludovic Patey (CNRS, Paris)***Lowness and avoidance: a guide to separation, Lecture 2***• Wednesday, July 30th, 2025**10:00 – 11:00 **Damir Dzhafarov (U of Connecticut)***From topology to combinatorics, Lecture 3*

11:00 – 11:30 **Coffee Break**

11:30 – 12:30 **Keita Yokoyama (Tohoku U)**

Reverse mathematics for analysis: an introduction, Lecture 2

12:30 – 14:30 **Lunch Break**

14:30 – 15:30 **Ludovic Patey (CNRS, Paris)**

Lowness and avoidance: a guide to separation, Lecture 3

15:30 – 15:50 **Coffee Break**

15:50 – 16:50 **Ludovic Patey (CNRS, Paris)**

Lowness and avoidance: a guide to separation, Lecture 4

- **Thursday, July 31st, 2025**

10:00 – 11:00 **Damir Dzhafarov (U of Connecticut)**

From topology to combinatorics, Lecture 4

11:00 – 11:30 **Coffee Break**

11:30 – 12:30 **Keita Yokoyama (Tohoku U)**

Reverse mathematics for analysis: an introduction, Lecture 3

12:30 – 14:30 **Lunch Break**

14:30 – 15:30 **Anton Freund (U of Würzburg)**

The strength of better-quasi-orderings, via ordinal analysis, Lecture 1

15:30 – 15:50 **Coffee Break**

15:50 – 16:50 **Anton Freund (U of Würzburg)**

The strength of better-quasi-orderings, via ordinal analysis, Lecture 2

- **Friday, August 1st, 2025**

10:00 – 11:00 **Damir Dzhafarov (U of Connecticut)**

From topology to combinatorics, Lecture 5

11:00 – 11:30 **Coffee Break**

11:30 – 12:30 **Keita Yokoyama (Tohoku U)**

Reverse mathematics for analysis: an introduction, Lecture 4

12:30 – 14:30 **Lunch Break**

14:30 – 15:30 **Anton Freund (U of Würzburg)**

The strength of better-quasi-orderings, via ordinal analysis, Lecture 3

15:30 – 15:50 **Coffee Break**

15:50 – 16:50 **Anton Freund (U of Würzburg)**

The strength of better-quasi-orderings, via ordinal analysis, Lecture 4

All talks take place at ESI Schrödinger and Boltzmann Lecture Hall!