20TH ANNIVERSARY

Schedule & Practical information

COMPUTABILITY in EUROPE

Schedule

Below you will find the schedule for the entire week, also available on the official website.

Time	Monday 8	Tuesday 9	Wednesday 10	Thursday 11	Friday 12
8:20 - 8:50	Registration				
8:50 - 9	Opening				
9 - 9:30	**Soskova**	**Downey**	Contributed Talks 3	**Seisenberger**	**Beckmann**
9:30 - 10	**Soskova**	**Downey**	Contributed Talks 3	**Seisenberger**	**Beckmann**
10 - 10:30	Coffee	Coffee	**CiE 20th Anniversary Panel**	Coffee	Coffee
10:30 - 11	Tutorial **Harrison-Trainor**	Contributed Talks 2	**CiE 20th Anniversary Panel**	Tutorial **Smets**	Special Sessions S-Q
11 - 11:30	Tutorial **Harrison-Trainor**	Contributed Talks 2	**CiE 20th Anniversary Panel**	Tutorial **Smets**	Special Sessions S-Q
11:30 -12	Lunch	Lunch	Lunch	Lunch	Lunch
12-13:30	Lunch	Lunch	Lunch	Lunch	Lunch
13:30 -14	**Miquel**	Tutorial **Harrison-Trainor**	**Mayordomo**	Tutorial **Smets**	Special Sessions S-Q
14 - 14:30	**Miquel**	Tutorial **Harrison-Trainor**	**Mayordomo**	Tutorial **Smets**	Special Sessions S-Q
14:30 - 15	Coffee	Coffee	Coffee	Coffee	Special Sessions S-Q
15 - 15:30	Special Sessions A-C	Special Sessions A-C	Special Sessions H-B	Special Sessions H-B	Special Sessions S-Q
15:30 - 16	Special Sessions A-C	Special Sessions A-C	Special Sessions H-B	Special Sessions H-B	Coffee
16 - 16:30	Special Sessions A-C	Special Sessions A-C	Special Sessions H-B	Special Sessions H-B	Contributed Talks 5
16:30 - 17	Coffee	Women in Computability	Coffee	aCiE Annual Meeting	Contributed Talks 5
17 - 17:30	Contributed Talks 1	Women in Computability	Contributed Talks 4	aCiE Annual Meeting	Conference closes
17:30 - 18	Contributed Talks 1	Women in Computability	Contributed Talks 4	Conference Dinner	Conference closes
18-18:30	Contributed Talks 1	Women in Computability	Contributed Talks 4	Conference Dinner	Conference closes

Invited Speakers

ARNOLD BECKMANN
Swansea University
Provably Total NP Search Problems

ROD DOWNEY
Victoria University of Wellington
Some Open Questions and Recent Results in Computable Banach Spaces

ELVIRA MAYORDOMO
University of Zaragoza
Further extensions of the point to set principle

ALEXANDRE MIQUEL
Universidad de la República
Implicative algebras: a survey

MONIKA SEISENBERGER
Swansea University
Modelling and Verification of Discrete and Continuous Systems in the Railway Domain

MARIYA SOSKOVA
University of Wisconsin–Madison
The theory of enumeration degrees and its fragments

Tutorial Speakers

MATTHEW HARRISON-TRAINOR
University of Illinois Chicago
An introduction to Borel reducibility

SONJA SMETS
University of Amsterdam
Dynamic Modalities for Social Networks

Accepted Papers

1. Juan P. Aguilera, Robert S. Lubarsky, and Leonardo Pacheco. *Higher-order feedback computation*.
2. Marcella Anselmo, Giuseppa Castiglione, Manuela Flores, Dora Giammarresi, Maria Madonia, and Sabrina Mantaci. *Isometric sets of words and generalizations of the Fibonacci Cubes*.
3. Nikolay Bazhenov, Marta Fiori-Carones, and Manat Mustafa. *On arithmetical numberings in reverse mathematics*.
4. Nikolay Bazhenov, Ekaterina Fokina, Dino Rossegger, Alexandra Soskova, and Stefan Vatev. *Learning families of algebraic structures from text*.
5. Jason Block. *Complexities of theories of profinite subgroups of Sω via tree presentations*.
6. Caleb M.H. Camrud and Timothy H. McNicholl. *Hyperarithmetic numerals*.
7. Domenico Cantone, Andrea De Domenico, and Pietro Maugeri. *The decision problem for undirected graphs with reachability and acyclicity*.
8. Merlin Carl. *Almost sure OTM-realizability*.
9. Chris J. Conidis. *The theory of Hilbert's Basis Theorem for multivariate polynomials over rings*.
10. Andrés Cordón-Franco, F. Félix Lara-Martín, and Manuel J.S. Loureiro. *Lipschitz determinacy and arithmetic transfinite recursion*.
11. Tala Eagling-Vose, Barnaby Martin, Daniël Paulusma, Mark Siggers, and Siani Smith. *Graph homomorphism, monotone classes and bounded pathwidth*.
12. Ekaterina B. Fokina and Sebastiaan A. Terwijn. *Computable structure theory of partial combinatory algebras*.
13. Jun Le Goh, Arno Pauly, and Manlio Valenti. *The weakness of finding descending sequences in ill-founded linear orders*.
14. Ellen Hammatt. *Structures of finite punctual dimension n > 2*.
15. Benjamin Hellouin de Menibus and Rémi Pallen. *Two-player domino games*.
16. Henning Fernau, Lakshmanan Kuppusamy, and Indhumathi Raman. *Counting simple rules in semi-conditional grammars is not simple*.
17. Ruslan Kornev. *On the group of computable automorphisms of the linear order of the reals*.
18. Lars Kristiansen and Juvenal Murwanashyaka. *A weak first-order theory of sequences*.
19. Arno Pauly and Giovanni Soldà. *Sequential discontinuity and first-order problems*.
20. Mikhail Peretyat'kin and Victor Selivanov. *Universal Boolean algebras with applications to semantic classes of models*.
21. Sam Sanders. *On the computational properties of weak continuity notions*.
22. Eduardo Skapinakis. *Recursion-theoretic alternation*.
23. Mikhail Starchak. *Existential definability of unary predicates in Büchi arithmetic*.
24. Hong Hanh Tran and Guohua Wu. *A diamond embedding theorem in the quotient structure R/Ncup*.
25. Gunnar Wilken. *Fundamental sequences based on localization*.
26. Tomoyuki Yamakami. *Quantum first-order logics that capture logarithmic-time/space quantum computability*.

Special sessions A-C

Algorithmic randomness and Kolmogorov complexity		Computable aspects of symbolic dynamics and tilings	
Monday	**Room 1.01**	**Monday**	**Room 1.02**
15 - 15:45	Satyadev Nandakumar	15 - 15:45	Etienne Moutot
15:45 - 16:30	Alexander Shen	15:45 - 16:30	Martin Kutrib
Tuesday	**Room 1.01**	**Tuesday**	**Room 1.02**
15 - 15:45	Jacob Fiedler	15 - 15:45	Markus Lohrey
15:45 - 16:30	Jun Le Goh	15:45 - 16:30	Matthieu Rosenfeld

Special sessions H-B

Computing Knowledge: Computational Aspects of Epistemic Logics (HaPoC)		Bio-inspired Computation (BiC)	
Wednesday	**Room 1.01**	**Wednesday**	**Room 1.02**
15 - 15:45	Nina Gierasimczuk	15 - 15:45	Mareike Fischer
15:45 - 16:30	Roman Kuznets	15:45 - 16:30	Simone Ciccolella
Thursday	**Room 1.01**	**Thursday**	**Room 1.02**
15 - 15:45	Giuseppe Primiero	15 - 15:45	Hilje Doekes
15:45 - 16:30	Alexandru Baltag & Sonja Smets	15:45 - 16:30	David Moi

Special sessions S-Q

Quantum Computation		Computable Structure Theory	
Friday	**Room 1.02**	**Friday**	**Room 1.01**
10:30 - 11:15	Chris Heunen	10:30 - 11:15	Pavel Alaev **(Online)**
11:15 - 12	Stefano Pirandola	11:15 - 12	Karen Lange
Friday	**Room 1.02**	**Friday**	**Room 1.01**
14 - 14:45	Ludovic Perret	14 - 14:45	Dino Rossegger
14:45 - 15:30	Alexandru Baltag & Sonja Smets	14:45 - 15:30	David Gonzalez

Contributed Talks 1

Monday	Room 1.01	Room 1.02	Room 2.01
17 - 17:15	Neumann, Pauly, Pradic. *The equational theory of the Weihrauch lattice with multiplication*	Wrocławski. *Degree spectra of computable relations on natural numbers and integers*	
17:15 - 17:30	Joosten. *Transfinite Turing Jumps through Provability*	Laboska. *Some computability-theoretic aspects of partition regularity over algebraic structures*	Hemery, Fages. *Absolute Functional Robustness in the cell: characterization, compilation and error control*
17:30 -17:45	Arno Pauly and Giovanni Soldà. *Sequential discontinuity and first-order problems.*	Mikhail Peretyat'kin and Victor Selivanov. *Universal Boolean algebras with applications to semantic classes of models.*	Swan. *Computable 2-groups in cubical assemblies*
17:45 - 18			Weiermann. *Monadic second order limit laws for natural well orderings*
18 - 18:15	Jun Le Goh, Arno Pauly, and Manlio Valenti. *The weakness of finding descending sequences in ill-founded linear orders.*	Ritter. *Isomorphism relations on classes of c.e. algebras*	Grigorian. *Varities of sameness in Homotopy Type Theory*
18:15 - 18:30		Georgiev, Vatev. *On punctual copies of* (ω, S)	

Contributed Talks 2

Tuesday	Room 1.01	Room 1.02	Room 2.01
10:30- 10:45	Ellen Hammatt. *Structures of finite punctual dimension n > 2.*	Hong Hanh Tran and Guohua Wu. *A diamond embedding theorem in the quotient structure R/Ncup.*	Henning Fernau, Lakshmanan Kuppusamy, and Indhumathi Raman. *Counting simple rules in semi-conditional grammars is not simple.*
10:45 -11			
11 - 11:15	Ruslan Kornev. *On the group of computable automorphisms of the linear order of the reals.* **(Online)**	Li. *There is a deep 1-generic set*	Mikhail Starchak. *Existential definability of unary predicates in Büchi arithmetic.*
11:15 -11:30		Jacobsen-Grocott. *Strong minimal pairs in the enumeration degrees.*	

Contributed Talks 3&4

Wednesday	Room 1.01	Room 1.02	Room 2.01
9-9:15	Andrés Cordón-Franco, F. Félix Lara-Martín, and Manuel J.S. Loureiro. *Lipschitz determinacy and arithmetic transfinite recursion.*	Jason Block. *Complexities of theories of profinite subgroups of Sω via tree presentations.*	Eduardo Skapinakis. *Recursion-theoretic alternation.*
9:15 - 9:30			
9:30 - 9:45	Lars Kristiansen and Juvenal Murwanashyaka. *A weak first-order theory of sequences.*	Ekaterina B. Fokina and Sebastiaan A. Terwijn. *Computable structure theory of partial combinatory algebras.*	Tomoyuki Yamakami. *Quantum first-order logics that capture logarithmic-time/space quantum computability.*
9:45 - 10			
Wednesday	Room 1.01	Room 1.02	Room 2.01
17 - 17:15	Nikolay Bazhenov, Marta Fiori-Carones, and Manat Mustafa. *On arithmetical numberings in reverse mathematics.* **(Online)**	Marcella Anselmo, Giuseppa Castiglione, Manuela Flores, Dora Giammarresi, Maria Madonia, and Sabrina Mantaci. *Isometric sets of words and generalizations of the Fibonacci Cubes.*	Juan P. Aguilera, Robert S. Lubarsky, and Leonardo Pacheco. *Higher-order feedback computation.*
17:15 - 17:30			
17:30 -17:45	Caleb M.H. Camrud and Timothy H. McNicholl. *Hyperarithmetic numerals.*	Domenico Cantone, Andrea De Domenico, and Pietro Maugeri. *The decision problem for undirected graphs with reachability and acyclicity.*	Merlin Carl. *Almost sure OTM-realizability.*
17:45 - 18			
18 - 18:15	Chris J. Conidis. *The theory of Hilbert's Basis Theorem for multivariate polynomials over rings.*	Tala Eagling-Vose, Barnaby Martin, Daniël Paulusma, Mark Siggers, and Siani Smith. *Graph homomorphism, monotone classes and bounded pathwidth.*	Sam Sanders. *On the computational properties of weak continuity notions.*
18:15 - 18:30			

Contributed Talks 5

Friday	Room 1.01	Room 1.02	Room 2.01
16 - 16:15	Nikolay Bazhenov, Ekaterina Fokina, Dino Rossegger, Alexandra Soskova, and Stefan Vatev. *Learning families of algebraic structures from text.*	Benjamin Hellouin de Menibus and Rémi Pallen. *Two-player domino games.*	Gunnar Wilken. *Fundamental sequences based on localization.*
16:15 - 16 30			
16:30 - 16:45	Cipriani. *Different criteria for learning families of structures*	David Roger Belanger. *Alternative proofs of the Coding Lemma*	Miller. *Skolem Functions for Galois Groups of Algebraic Field Extensions*
16:45 -17	Franklin, Rojas. *Fourier series and Martin-Löf randomness*	Nakid Cordero. *Uniform Martin's Conjecture in the Enumeration Degrees*	Oh, Kim, Lee, Choi, Park. *On structures in which P = NP* **(Online)**

AMSTERDAM 2005

HEIDELBERG 2009

BUDAPEST 2014

DURHAM 2019

20 Years of CiE

Arnold Beckmann
Paola Bonizzoni
Peter van Emde Boas
Benedikt Löwe
Elvira Mayordomo
Andrea Sorbi
Alexandra Soskova
Mariya Soskova

As we mark two decades of the Computability in Europe conference series, we invite you to a special panel discussion that reflects on the history of CiE and explores the future of computability. This event aims to both look back on our past achievements and inspire future advancements.

This will be a wonderful opportunity to gather our community and celebrate the first 20 years of Computability in Europe together.

The Panel will be hosted by Russel Miller

2024

CiE

20TH ANNIVERSARY

On Wednesday from 10 to 11:30 in the common room.

AUC Students'Event
Mon, 8 Jul - Wed, 10 Jul

The Computability in Europe satellite events aim to create a space where Bachelor, Master and PhD students interested in the fields of Logic and Computability can present their research and share their academic journeys.

Events:

Graduates' Presentations on Computability
1. **Fiammetta Rosenblatt** – Epistemic Threshold Models: A Logical Approach to Network Dynamics
2. **Lynn Engelberts** – Methods in Quantum Cryptanalysis
3. **Pedram Noohi** – Nonstandard Real Numbers: Applications to Analysis and Infinite Lotteries
4. **Charlotte Out** – Why Rumors Spread Fast in Social Networks, and How to Stop It
5. **Ilai Bachrach** – Identifying Causal Links in Semantic Learning
6. **Sarah de Jong** – Theoretical Computer Science

Capstones on Computability
1. **Zoé Lucas** – Computational Analysis of P-Glycoprotein Drug Inhibitors: Insights from Molecular Dynamics
2. **Yuval Goren** – To Infinity and Beyond: Visualization of Ordinal Numbers. A demonstrative case study of the epistemic role of visualization of mathematics within mathematical practice
3. **Nicholas Denis** – Manipulability in Party List Proportional Representation

Graduate Academic Journey Panel
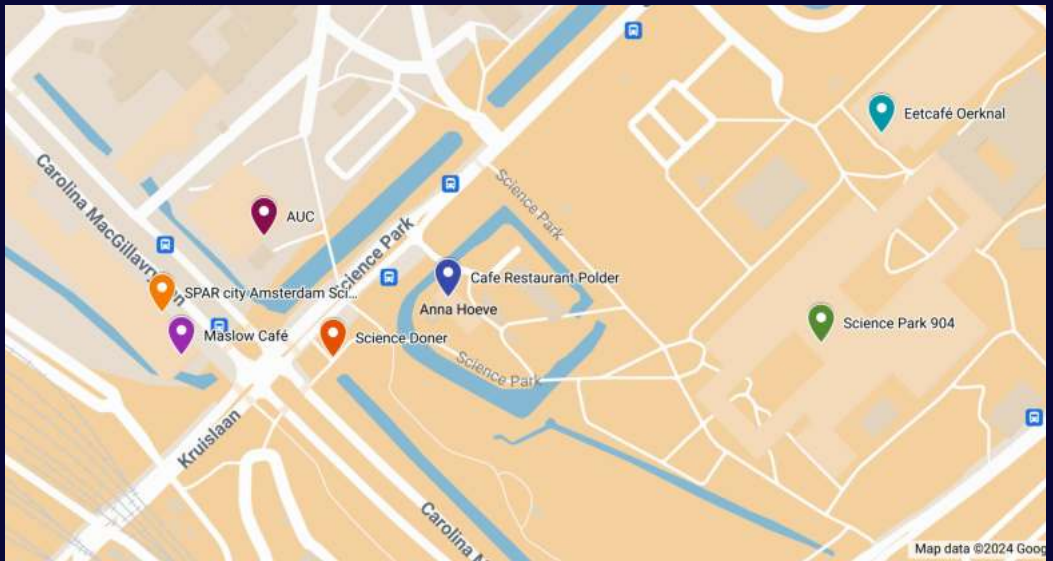
Taking a break? Head over to one of the starred spots.

904: This is the main UvA building in Science Park with a big caffetteria.

Maslow Café: Grab and end-of-day drink or a coffee and a snack, Maslow is best for those looking to spend less than an hour to refuel and regroup.

Polder: Sit down, have a warm meal, and immerse youself into the local academic community

Eetcafé Oerknal: A lively café serving a mix of craft beers, cocktails, and comfort food in a welcoming setting.

Spar: For those of us on the go, Spar is best for a quick snack or coffee

Science Doner: Eat like a student! This food cart offers quick, filling, warm meals

Interactive map available on the conference website.

wifi & connection information:
The "Amsterdam Science Park 2" network is a
free to use service available in most of Science
Park. Just connect and sign in!

Sponsors