

International Workshop on Validated Numerics for Computer-Assisted Proofs

Validated Numerics for Computer-Assisted Proofs

6-10 July 2026, ICMS, Bayes Centre, Edinburgh

- [Overview](#)
- [News and Announcements](#)
- [Short Programme](#)
- [Long Programme and Abstracts](#)
- [Participants](#)

Overview

Scientific Organisers

- Andrew Burbanks, *University of Portsmouth*
- Ben Mestel, *The Open University (retired)*
- Mark Pollicott, *University of Warwick*
- Julia Slipantschuk, *University of Bayreuth*

About the Workshop

Validated numerics, rooted in Moore's interval analysis, uses the arithmetic of real intervals to rigorously bound nonlinear functions and control floating-point errors in computations. These methods extend naturally to higher-dimensional and function spaces, forming the basis of rigorous numerical functional analysis. Combined with set-oriented techniques, validated numerics has enabled computer-assisted proofs to address a variety of problems in dynamical systems. Recent advances in computing, and wider availability of platforms that provide support, have led to a resurgence of research activity in the field of validated numerics (and application to computer-assisted proofs).

This ICMS workshop aims to bring together a group of mathematicians at all career stages in the area of validated numerics and its applications:

- to discuss the history and development of the field;
- to review current progress across different application areas (including computer-assisted proofs that use this methodology);
- to develop a young and diverse group of researchers in this field;
- to identify further open problems for which a validated-numerics approach may be profitably utilised;
- to review and compare different software platforms and to discuss common standard features for further software developments;

- to scope international collaborative research projects and associated funding applications to advance the field in the next 10 – 15 years;
- to establish an international Special Interest Group in Validated Numerics as a focus for further activity in this field.

Participation

Participation is by invitation. Please indicate your interest using the button provided at the top of the [ICMS page](#). Accommodation and lunches are provided for invited participants on the main workshop days. Limited support is available to assist with transport.

Resources

- [Coming to ICMS](#)
- [Code of Conduct](#)
- [Caring Support](#)
- [Scam Warning](#)

Sustainability statement: Where food is provided, the ICMS offers an entirely vegetarian menu. Single-use plastics are minimised. Unnecessary printed materials will be avoided. Recommended accommodation is within walking distance of the institute. There are excellent public transport links.

Sponsors and Funders

The workshop is supported by the [International Centre for Mathematical Sciences](#) (ICMS), Edinburgh, via Workshop Grant 2416-BUR, the [London Mathematical Society](#) (LMS) via the Scheme 1 Conference Grant 12502, and the [Glasgow Mathematical Journal Trust](#) (GMJT) via the GMJT ICMS Block Grant 2026/2027.



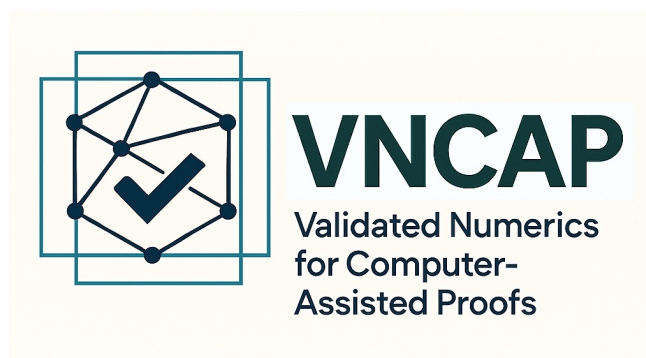
The ICMS is supported by the [Engineering and Physical Sciences Research Council](#) (EPSRC), [Heriot Watt University](#), and the [University of Edinburgh](#).



Print version of programme

The latest draft programme is available as a PDF file (note that the programme may be subject to changes):





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Short Programme

Note: The programme is provisional and subject to changes.

- [Sun 05 Jul 2026](#)
- [Mon 06 Jul 2026](#)
- [Tue 07 Jul 2026](#)
- [Wed 08 Jul 2026](#)
- [Thu 09 Jul 2026](#)
- [Fri 10 Jul 2026](#)

Sun 05 Jul 2026

Time	Title	Speaker
	Arrivals and Check-in	
	Suggested activity	

Mon 06 Jul 2026

Time	Title	Speaker
09:00	Registration and refreshments	
10:00	Housekeeping and Welcome	
10:15	The beginnings of validated numerics, in memory of Hans Koch and Oscar Lanford	Jean-Pierre Eckmann
11:00	Coffee	
11:30	Validated polynomial optimisation for computer-assisted proofs in ODEs	Jeremy Parker
12:00	Computer-assisted proof of existence and stability of solitary waves in the Whitham equation	Matthieu Cadiot
12:30	Lunch	

14:00	Computer-assisted proofs in nonlinear dynamics based on spectral methods	Jan Bouwe van den Berg
14:45	Rigorous enclosure of Lyapunov exponents of stochastic flows	Hugo Chu
15:30	Coffee	
16:00	Discussions	
17:00	Welcome Reception	

Tue 07 Jul 2026

Time	Title	Speaker
09:00	Registration and refreshments	
09:25	Housekeeping and Welcome	
09:30	Verified error bounds for sparse systems	Siegfried Rump
10:30	(TBC)	Nicolae Mihalache
11:00	Coffee	
11:30	Existence of cycles of the doubling operator for coupled maps	Zainab Rahman
12:00	A computer-assisted proof of dynamo growth in the stretch-fold-shear map	Benjamin Mestel
12:30	Lunch	
14:00	Computer Assisted Proofs in Julia applied to Area Preserving Twists Maps	George Browne
14:45	On attractors of Fibonacci maps	Artem Dudko
15:30	Coffee	
16:00	Discussions	
17:00	Reception & Networking	

Wed 08 Jul 2026

Time	Title	Speaker
09:00	Registration and refreshments	
09:25	Housekeeping and Welcome	
09:30	Computer assisted proofs for invariant manifolds and their use in connecting orbit problems	Jason Mireles-James
10:15	Arnold Diffusion and Blenders in the Three-Body Problem	Maciej Capinski
11:00	Coffee	
11:30	Computer Assisted Proofs for Nonlinear Problems in the Borel Plane and Validated Numerics for Complex Convolutions	Juan Miranda
12:00	Taylor models in Julia	Luis Benet Fernández
12:30	(TBC)	Olivier Henot
13:00	Packed Lunch	
14:00	HALF DAY SUGGESTIONS:	
	(A) Tour of the James Clerk Maxwell House, 14	David

India Street

Kerridges

(B) Walk to Arthur's Seat

(C) Walk exploring Old Town, Royal Mile, Dean Village

(D) Scottish Museum

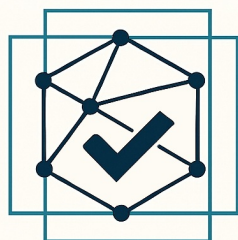
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Thu 09 Jul 2026

Time	Title	Speaker
09:00	Registration and refreshments	
09:25	Housekeeping and Welcome	
09:30	The CAPD library - a tool for validation in dynamical systems	Daniel Wilczak
10:30	Rigorous integration of differential inclusions and delay differential equations in the CAPD library	Tomasz Kapela
11:00	Coffee	
11:30	(Part I - TBC)	Polina Vytnova
12:00	(Part II - TBC)	Caroline Wormell
12:30	Lunch	
14:00	Rigorous integration of dissipative PDEs on the torus	Piotr Zgliczynski
14:45	Lower bounds on the Hausdorff dimension of some Julia sets	Igors Gorbovickis
15:30	Coffee	
16:00	Discussions	
	?	

Fri 10 Jul 2026

Time	Title	Speaker
09:00	Registration and refreshments	
09:25	Housekeeping and Welcome	
09:30	Computer-assisted proofs for periodic solutions in state-dependent delay equations	Jean-Philippe Lessard
10:15	Rigorous computation of renormalization fixed points using Chebyshev series	Maxime Breden
11:00	Coffee	
11:30	(TBC)	Julia Slipantschuk
12:00	Closing remarks and thanks	
12:30	Lunch	
14:00	Close	
14:00	Close	



VNCAP

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Long Programme and Abstracts

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Sun 05 Jul 2026

Arrivals and Check-in

Suggested activity

Mon 06 Jul 2026

09:00-10:00 Registration and refreshments

Join us at the ICMS, top floor of the Bayes Centre. Refreshments will be provided.

10:00-10:15 Housekeeping and Welcome

10:15-11:00 The beginnings of validated numerics, in memory of Hans Koch and Oscar Lanford

Jean-Pierre Eckmann - *Université de Genève, Switzerland*

Although “everybody” might know how this subject evolved, I will try to reconstruct how the early issues and difficulties came up, and how Koch and Lanford (and many others) worked to make this subject a common modern tool in analysis.

11:00-11:30 Coffee

11:30-12:00 Validated polynomial optimisation for computer-assisted proofs in ODEs

Jeremy Parker - *University of Dundee, Scotland*

I will present the sum-of-squares optimisation framework for finding polynomials which satisfy pointwise nonnegativity conditions. This can be used to construct certificates of different global properties and bounds in ODE dynamical systems whose vector field is a polynomial function. Specific examples are proving different definitions of global stability, and bounding global attractors, time averages, attractor dimension and orbit periods. Strong theorems govern when such methods can always give certificates, or give sharp bounds. CAPs can be constructed by validating the polynomial certificates using rational or interval arithmetic. If time allows I will describe how to adapt these methods to nonpolynomial, PDE and discrete-time systems.

12:00-12:30 Computer-assisted proof of existence and stability of solitary waves in the Whitham equation

Matthieu Cadiot - *École Polytechnique, France*

The Whitham equation is a nonlocal model used to study shallow water waves, capturing complex phenomena such as wave breaking, peaking, and various traveling wave solutions. In this talk, I will present a computer-assisted methodology for studying solitary waves—traveling waves that vanish at infinity. In particular, the method provides a framework for the constructive existence proof of a true solution in the close vicinity of an approximate, numerically computed solution. Furthermore, the tight control obtained over the solution enables us to enclose the spectrum of the linearization at the solitary wave, leading to a rigorous and conclusive stability analysis.

12:30-14:00 Lunch

14:00-14:45 Computer-assisted proofs in nonlinear dynamics based on spectral methods

Jan Bouwe van den Berg - *Vrije Universiteit Amsterdam, Netherlands*

Finding solutions of problems in nonlinear dynamics often involves simulations. Turning these numerical computations into mathematical theorems requires computer assistance. Such computer-assisted proofs focus on specific solutions (or invariant objects more generally) to specific equations. Nevertheless, in this talk we take a more universal viewpoint and describe a relatively simple spectral framework in which many of these problems can be cast. In particular, since these systems and their solutions are often locally analytic, one can recast the problem into one concerning sequence spaces of rapidly decaying coefficients, say of a Taylor, Fourier, or Chebyshev series. The core of the analysis is then to manipulate such sequences, e.g., evaluating derivatives and nonlinearities, by computer, while keeping track of truncation and rounding errors. We discuss how one can use basic complex and Fourier analysis to accomplish this task for a wide variety of problems in nonlinear dynamics.

14:45-15:30 Rigorous enclosure of Lyapunov exponents of stochastic flows

Hugo Chu - *École Polytechnique, France*

Rigorously enclosing Lyapunov exponents of stochastic flows is a long-standing and notoriously difficult problem: even determining the sign of the top exponent is often out of reach outside special structures or perturbative regimes. In this paper, we develop a computer-assisted method to obtain rigorous upper and lower

bounds on Lyapunov exponents of stochastic flows under mild hypoellipticity assumptions. Our approach starts from the Furstenberg-Khasminskii representation of the top Lyapunov exponent as an ergodic average over the invariant measure of the associated projective process, but crucially avoids any rigorous computation of that invariant measure. Instead, we introduce a numerical adjoint method, amenable to rigorous numerics, and show that an approximate solution of the associated Poisson equation yields a certified enclosure of the Lyapunov exponent via an explicit bound on the residual. This converts a non-rigorous numerical approximation into a rigorous quantitative estimate. The method applies to systems on both compact and non-compact state spaces, does not require special geometric structure, and is not restricted to small-noise or other perturbative settings. We use it to prove positivity of the top Lyapunov exponent for several stochastic systems, including examples exhibiting noise-induced chaos and parameter-dependent sign changes, and we combine it with continuation methods to obtain rigorous bounds over large parameter regions.

15:30-16:00 Coffee

16:00-17:00 Discussions

17:00-18:00 Welcome Reception

Tue 07 Jul 2026

09:00-09:25 Registration and refreshments

09:25-09:30 Housekeeping and Welcome

09:30-10:30 Verified error bounds for sparse systems

Siegfried Rump - *Hamburg University of Technology, Germany*

The solution of sparse systems is ubiquitous in numerical computations. Despite several efforts, there were no satisfactory method for computing verified bounds for the solution and was one of the "Grand Challenges" in verification methods for decades. In this talk we present two algorithms to compute entrywise error bounds for the solution of general real or complex sparse systems with condition number up to the limit 10^{16} . Our algorithms split into three subalgorithms for symmetric positive definite, symmetric indefinite and general input matrix A . A key point is a factorization of A into $L_1 L_2$ such that L_1 and L_2 have identical sets of singular values with the smallest one close to $\sigma_{\min}(A)^{1/2}$. A mathematically correct lower bound on $\sigma_{\min}(L_1) = \sigma_{\min}(L_2)$ is then computed using $L_1^T L_1$. Based on that a second method exploring the inertia of a symmetric/Hermitian matrix is presented. It is often slower but more robust, i.e., it may produce verified inclusions where the first method fails. We show how to compute inclusions with almost maximal accuracy for all entries, i.e., all bounds differ by few bits. That is based on a fast method to compute accurate approximations and bounds for extremely ill-conditioned dot products with a very efficient Matlab implementation. Both approaches are used to compute verified error bounds for the solution of least squares problems and for underdetermined linear systems. Inclusions of the solution of general real or complex systems of nonlinear equations with sparse Jacobi matrix are computed by transforming the problem into a linear system with point matrix and interval right hand side. All algorithms are implemented in pure Matlab/Octave and included from Version 14 of INTLAB, the Matlab/Octave toolbox for verified computations.

10:30-11:00 (TBC)

Nicolae Mihalache - *Univ Paris-Est Creteil, France*

(Pending)

11:00-11:30 Coffee

11:30-12:00 Existence of cycles of the doubling operator for coupled maps

Zainab Rahman - *University of Portsmouth, England*

We study two-dimensional non-invertible maps with multiple parameters, with critical points arising from a fold singularity. Working in spaces of pairs of analytic maps, we prove the existence of a two-cycle conjectured by Kuznetsov et. al. of the renormalisation (doubling) operator for systems with C-type critical scaling. We bound the universal constants that describe state-space scaling. Our work generalises the recent work on FS-type and FQ-type systems from fixed points to periodic orbits of the corresponding renormalisation operators. The proof relies on rigorous (validated) computations to establish that a variant of Newton's method for the two-cycle is a contraction map. This is joint work with Andrew Burbanks and Maria Pickett.

12:00-12:30 A computer-assisted proof of dynamo growth in the stretch-fold-shear map

Benjamin Mestel - *Open University (Retired), England*

(Pending - On behalf of Farhana Pramy)

12:30-14:00 Lunch

14:00-14:45 Computer Assisted Proofs in Julia applied to Area Preserving Twists Maps

George Browne - *The Open University, England*

(Pending)

14:45-15:30 On attractors of Fibonacci maps

Artem Dudko - *Institute of Mathematics of the Polish Academy of Sciences (IM PAN), Poland*

In 1990s Bruin, Keller, Nowicki, and van Strien showed that smooth unimodal maps with Fibonacci combinatorics and sufficiently high degree of a critical point have a wild attractor, i.e. their metric and topological attractors do not coincide. However, until recently there were no reasonable estimates on the degree of the critical point needed. In the talk I will present a constructive approach for studying attractors of maps, which are periodic points of a renormalization. Using this approach and rigorous computer estimates, we show that the Fibonacci map of degree $d=3.8$ does not have a wild attractor, but that for degree $d=5.1$ the wild attractor exists. The talk is based on a joint work with Denis Gaidashev.

15:30-16:00 Coffee

16:00-17:00 Discussions

17:00-18:00 Reception & Networking

Wed 08 Jul 2026

09:00-09:25 Registration and refreshments

09:25-09:30 Housekeeping and Welcome

09:30-10:15 Computer assisted proofs for invariant manifolds and their use in connecting orbit problems

Jason Mireles-James - *Florida Atlantic University, USA*

Some interesting applications to celestial mechanics and geodesic flow, helped by some advances made over the last few years on validated numerics for the DFT (the same technology that helped us do our Feigenbaum fixed point paper).

10:15-11:00 Arnold Diffusion and Blenders in the Three-Body Problem

Maciej Capinski - *AGH University Kraków, Poland*

We present a computer-assisted methodology based on the propagation of topological discs and its use in analysis of global dynamics. The method combines topological techniques with validated numerics and can be applied to detect both diffusion as well as persistence of symbolic dynamics. We discuss its applications to Arnold diffusion and blenders in celestial mechanics.

11:00-11:30 Coffee

11:30-12:00 Computer Assisted Proofs for Nonlinear Problems in the Borel Plane and Validated Numerics for Complex Convolutions

Juan Miranda - *Florida Atlantic University, USA*

The Borel transform is a useful tool for studying functional equations whose solutions are infinitely differentiable but not analytic. For nonlinear problems, matters are complicated by the fact that the transform takes pointwise multiplications to complex convolutions. Nevertheless, Bonckaert and Maeschalck (2008) have shown that complex convolution results in a Banach algebra structure, after introduction of an appropriate norm. I will discuss how these tools are used to approximate non-analytic functions and obtain rigorous computer assisted error bounds on divergent series in computer assisted proofs.

12:00-12:30 Taylor models in Julia

Luis Benet Fernández - *Universidad Nacional Autónoma de México (UNAM), Mexico*

(Pending)

12:30-13:00 (TBC)

Olivier Henot - *National Taiwan University, Taiwan*

(Pending)

13:00-14:00 Packed Lunch

14:00-18:00 HALF DAY SUGGESTIONS:

Wednesday has been planned as a half-day at the ICMS to provide participants with opportunities to network and explore the historic city of Edinburgh together in the afternoon. A number of activities are suggested and some will be led by the organisers.

(A) Tour of the James Clerk Maxwell House, 14 India Street

David Kerridges - *James Clerk Maxwell Foundation, Scotland*

(B) Walk to Arthur's Seat

(C) Walk exploring Old Town, Royal Mile, Dean Village

(D) Scottish Museum

?

Thu 09 Jul 2026

09:00-09:25 Registration and refreshments

09:25-09:30 Housekeeping and Welcome

09:30-10:30 The CAPD library - a tool for validation in dynamical systems

Daniel Wilczak - *Jagiellonian University in Kraków, Poland*

The CAPD library [1,2] is a C++ library devoted to validated numerics for dynamical systems. It has been developed for over 30 years by a research team at the Jagiellonian University in Kraków, Poland. The library is mostly oriented towards continuous-time systems and implements rigorous integrators for ODEs, higher order variational equations [3,4], differential inclusions [5], and a class of dissipative PDEs [6]. In the talk I'm going to present the basic interface of the library, then give a few one-screen short yet not very trivial case studies. I will present an application of the library to prove the existence of a uniformly hyperbolic chaotic attractor in a 4D non-autonomous ODE [7]. References: [1] <https://github.com/CAPDgroup/CAPD> [2] T. Kapela, M. Mrozek, D. Wilczak, P. Zgliczyński. CAPD::DynSys: a flexible C++ toolbox for rigorous numerical analysis of dynamical systems. *Commun Nonlinear Sci Numer Simul* 2021;101:105578. [3] P. Zgliczyński, C^1 -Lohner algorithm, *Found. Comp. Math*, 2(4), pp.429-465 [4] D. Wilczak, P. Zgliczyński, C^r -Lohner algorithm, *Schedae Informaticae* 20, 9-46, 2011. [5] T. Kapela, P. Zgliczyński, A Lohner-type algorithm for control systems and ordinary differential inclusions, *Disc. Cont. Dyn. Sys-B*, 11(2), pp.365-385 [6] D. Wilczak, P. Zgliczyński. A geometric method for infinite-dimensional chaos: Symbolic dynamics for the Kuramoto-Sivashinsky PDE on the line. *J Differential Equations* 2020;269(10):8509-48 [7] D. Wilczak, Uniformly hyperbolic attractor of the Smale-Williams type for a Poincaré map in the Kuznetsov system, *SIADS*. 9 (2010), 1263-1283.

10:30-11:00 Rigorous integration of differential inclusions and delay differential equations in the CAPD library

Tomasz Kapela - *Jagiellonian University in Kraków, Poland*

(Pending)

11:00-11:30 Coffee

11:30-12:00 (Part I - TBC)

Polina Vytnova - *University of Surrey, England*

(Pending)

12:00-12:30 (Part II - TBC)

Caroline Wormell - *The University of Sydney, Australia*

(Pending)

12:30-14:00 Lunch

14:00-14:45 Rigorous integration of dissipative PDEs on the torus

Piotr Zgliczynski - *Jagiellonian University in Kraków, Poland*

We will describe the proof of the existence of symbolic dynamics for the Kuramoto-Sivashinsky PDE on the line: a semiconjugacy with the

Bernoulli shift, the existence of countably many periodic orbits and homo- and heteroclinic connections between them. On this example of computer assisted proof we would like to explain how to perform rigorous numerics for dissipative PDEs with periodic boundary conditions and how to use finite dimensional tools from dynamics in the context of dissipative PDEs.

14:45-15:30 Lower bounds on the Hausdorff dimension of some Julia sets

Igors Gorbovickis - *Constructor University, Germany*

(Pending)

15:30-16:00 Coffee

16:00-17:00 Discussions

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Fri 10 Jul 2026

09:00-09:25 Registration and refreshments

09:25-09:30 Housekeeping and Welcome

09:30-10:15 Computer-assisted proofs for periodic solutions in state-dependent delay equations

Jean-Philippe Lessard - *McGill University, Canada*

State-dependent delay equations (SDDEs) pose significant theoretical and computational challenges, as the delay depends on the evolving state through nonlinear composition terms. In contrast with ODEs, parabolic PDEs, or delay equations with constant delays, SDDEs may fail to generate a semiflow. Even when a semiflow exists, the dynamics evolve on an infinite-dimensional phase space, with the composition operator introducing additional analytical difficulties. As a result, periodic solutions, which are central to understanding recurrent dynamics, are particularly challenging to study in this setting. In this talk, we present a computer-assisted, constructive method to prove the existence of periodic solutions in genuinely state-dependent delay equations, without relying on perturbative reductions to ODEs or PDEs. Our approach combines Fourier expansions with a Newton–Kantorovich argument in a low-regularity Banach space. The nonlinear composition terms are handled rigorously using discrete Fourier transforms, contour integrals, and the discrete Poisson formula. We illustrate the method through three applications of increasing complexity: (1) a forced SDDE with prescribed period; (2) an autonomous SDDE where the period is part of the unknowns, following Calleja, Humphries, and Krauskopf (2018); and (3) an SDDE with a threshold nonlinearity, requiring unfolding parameters to handle the discontinuity and determine the period, based on Gedeon, Humphries, Mackey, Walther, and Wang (2025). This is joint work with Jan Bouwe van den Berg (VU University Amsterdam), Maxime Breden (École Polytechnique), Matthieu Cadiot (École Polytechnique), and Kevin Church (CRM, Montréal).

10:15-11:00 Rigorous computation of renormalization fixed points using Chebyshev series

Maxime Breden - *École Polytechnique, France*

In this talk, we revisit the computer-assisted study of renormalization fixed points initiated by Lanford, in his proof of the Feigenbaum conjectures related to period doubling cascades in families of unimodal maps. Our approach follows rather closely the original works in this field, the main difference being that we use Chebyshev

series expansions instead of Taylor series. This generates some technical hurdles that I will discuss, but also makes the proof more general and versatile. In particular, we are able to get tight enclosures of Feigenbaum-like constants for other bifurcation cascades (e.g., period tripling), and for critical points of higher order. This is joint work with Jorge Gonzalez and Jason Mireles James.

11:00-11:30 Coffee

11:30-12:00 (TBC)

Julia Slipantschuk - *University of Bayreuth, Germany*

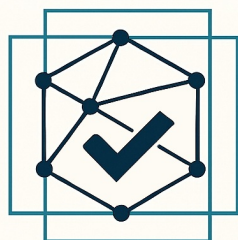
(Pending)

12:00-12:30 Closing remarks and thanks

12:30-14:00 Lunch

14:00-14:00 Close

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Participants

There are 31 confirmed participants, from institutions in 13 countries:

- Thomas Baldini - *Centrale Méditerranée, France*
- Luis Benet Fernández - *Universidad Nacional Autónoma de México (UNAM), Mexico*
- Maxime Breden - *École Polytechnique, France*
- George Browne - *The Open University, England*
- Andrew Burbanks - *University of Portsmouth, England*
- Matthieu Cadiot - *École Polytechnique, France*
- Maciej Capinski - *AGH University Kraków, Poland*
- Hugo Chu - *École Polytechnique, France*
- Artem Dudko - *Institute of Mathematics of the Polish Academy of Sciences (IM PAN), Poland*
- Jean-Pierre Eckmann - *Université de Genève, Switzerland*
- Igors Gorbovickis - *Constructor University, Germany*
- Olivier Henot - *National Taiwan University, Taiwan*
- Tomasz Kapela - *Jagiellonian University in Kraków, Poland*
- Gabor Kiss - *Queen's University Belfast, Northern Ireland*
- Jean-Philippe Lessard - *McGill University, Canada*
- Benjamin Mestel - *Open University (Retired), England*
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- Juan Miranda - *Florida Atlantic University, USA*
- Jason Mireles-James - *Florida Atlantic University, USA*
- Jeremy Parker - *University of Dundee, Scotland*
- Owen Pennington - *University of Surrey, England*
- Maria Pickett - *University of Portsmouth, England*
- Mark Pollicott - *University of Warwick, England*
- Zainab Rahman - *University of Portsmouth, England*
- Siegfried Rump - *Hamburg University of Technology, Germany*
- Julia Slipantschuk - *University of Bayreuth, Germany*
- Jan Bouwe van den Berg - *Vrije Universiteit Amsterdam, Netherlands*
- Polina Vytnova - *University of Surrey, England*

- Daniel Wilczak - *Jagiellonian University in Kraków, Poland*
- Caroline Wormell - *The University of Sydney, Australia*
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