

34th EACSL Annual Conference on Computer Science Logic

CSL 2026, February 23–28, 2026, Paris, France

Edited by

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■ Preface

This volume contains the papers presented at CSL 2026, the 34th meeting in the conference series Computer Science Logic (CSL), the annual conference of the European Association for Computer Science Logic (EACSL). CSL 2026 was held from the 24th to 27th of February 2026 in Paris, France.

CSL started as a series of international workshops, and became an international conference in 1992. Previous instalments of CSL were held in Amsterdam (2025), Naples (2024), Warsaw (2023), Göttingen (2022, online), Ljubljana (2021, online), Barcelona (2020), Birmingham (2018), Stockholm (2017), Marseille (2016), Berlin (2015), Vienna (2014), Torino (2013), Fontainebleau (2012), Bergen (2011), Brno (2010), Coimbra (2009), Bologna (2008), Lausanne (2007), Szeged (2006), Oxford (2005), Karpacz (2004), Vienna (2003), Edinburgh (2002), Paris (2001), Munich (2000), Madrid (1999), Brno (1998), Aarhus (1997), Utrecht (1996), Paderborn (1995), Kazimierz (1994), Swansea (1993) and San Miniato (1992).

CSL is an interdisciplinary conference, spanning both basic and application-oriented research in mathematical logic and computer science. It is a forum for the presentation of research on all aspects of logic and its applications, including automated deduction and interactive theorem proving, constructive mathematics and type theory, equational logic and term rewriting, automata and games, game semantics, modal and temporal logic, logical aspects of computational complexity, finite model theory, computational proof theory, logic programming and constraints, lambda calculus and combinatory logic, domain theory, categorical logic and topological semantics, database theory, specification, extraction and transformation of programs, logical aspects of quantum computing, logical foundations of programming paradigms, verification and program analysis, linear logic, higher-order logic, and non-monotonic reasoning.

The conference received 115 full-paper blind submissions, from which the programme committee selected 43 papers for presentation at the conference. Each paper was reviewed by at least three members of the programme committee, with the crucial help of 125 external reviewers who contributed 137 of the total 351 reviews. The submission and reviewing process, programme committee discussion, and author notifications were all handled through the EasyChair conference management system.

In addition to the contributed papers, there were four invited talks, by: Pierre Clairambault (Aix-Marseille University, France), Sandra Kiefer (University of Oxford, UK), Gordon Plotkin (University of Edinburgh, UK), and Ana Sokolova (University of Salzburg, Austria). We thank the invited speakers for their stimulating talks and papers, which greatly contributed to the success of the conference.

In this year the 2025 Alonzo Church Award for Outstanding Contributions to Logic and Computation was presented at CSL to Paul Blain Levy. Initiated by Alonzo Church, the research programme into the λ -calculus as an abstract model of computation has spurred volumes of fundamental research in logic and computation. By the end of the 20th century, the studies of the λ -calculus in its purely logical form and its applied effectful form bifurcated. In his outstanding contributions

- Paul Blain Levy. *Call-By-Push-Value: A Functional/Imperative Synthesis*. Semantics Structures in Computation 2, Springer 2004
- Paul Blain Levy. *Call-by-Push-Value: Decomposing call-by-value and call-by-name*. Higher-Order and Symbolic Computation 19(4): 377-414 (2006)

Levy has reunited the many existing research streams into the study of one subsuming calculus: Call-by-Push-Value (CBPV). Levy developed and presented an extraordinarily large body of evidence spanning a cross-section of the semantic theory of the λ -calculus and its

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application to programming language modelling, including: algebraic datatypes, operational semantics, denotational semantics, and equational theories. To date, CBPV remains a unifying starting point in the study of computational and logical phenomena, including: effects, polarisation, term normalisation, type-isomorphisms, and program transformations. In addition to its scientific contribution, the nominated monograph is a unique access-point into the culmination of decades of logic and programming language semantics.

One of the major regular events at CSL conferences is the presentation of the Ackermann Award: the annual EACSL award for an outstanding dissertation in the area of logic in computer science. The recipients of the award are selected by a jury from a field of international nominees, and the recipients receive their award at a ceremony at which they give a prize lecture on their dissertation. This year, the jury elected to give the Ackermann Award 2025 jointly to Toghrul Karimov for the PhD thesis titled *Algorithmic Verification of Linear Dynamical Systems*, supervised by Joël Ouaknine at Saarland University (Germany), and to Nikolas Mählmann for the PhD thesis titled *Monadically Stable and Monadically Dependent Graph Classes: Characterizations and Algorithmic Meta-Theorems*, supervised by Sebastian Siebertz at the University of Bremen (Germany). The award was presented during the conference. The laudation for the award is included in the proceedings.

Another significant event at CSL 2026 was the presentation of the Helena Rasiowa Award, named after the eminent Polish mathematician and logician Helena Rasiowa (1917–1994) whose work had an essential impact on the emerging field of logic in computer science. The Helena Rasiowa Award, presented for the first time at CSL 2022, is given to the best paper, as decided by the programme committee, that is written solely by students or to which students were the main contributors. There was a strong field of candidates for this award edition, with 18 of the accepted papers reported as eligible by their authors. From these, the programme committee selected the recipient of the Helena Rasiowa Award: Perry Hart for the paper titled *On Left Adjoints Preserving Colimits in HoTT*. Perry Hart is a PhD student at the University of Minnesota under the supervision of Kuen-Bang Hou (Favonia).

CSL 2026 also had two affiliated workshops: the *Logic Mentoring Workshop* (LMW@CSL) and the *12th International Workshop on Fixed Points in Computer Science* (FICS 2026).

We are very grateful to all the members of the CSL 2026 programme committee and external reviewers for their careful and efficient evaluation of the submitted papers. We would also like to thank the members of the organization committee – Flavien Breuvert, Stefano Catozi, Emily Clement, Jacopo Furlan, Munyque Mittelman, Elaine Pimentel, and Morgan Rogers – for taking care to ensure a smooth-running and enjoyable conference. It was a pleasure to work with Maribel Fernandez who, as the EACSL president, provided valuable guidance. The proceedings of CSL 2026 are published as a volume in the LIPIcs series. We thank Michael Wagner and all the Dagstuhl/LIPIcs team for their ongoing support and for the high quality preparation of these proceedings. Last, but not least, we are very grateful to the Logic and Computation team of the LIPN (Laboratoire d’Informatique de Paris-Nord) at Sorbonne Paris Nord University for supporting the organisation of this conference.

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