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ASL NEWSLETTER April 2025

• 2024 Sacks Prize Awarded. The ASL Committee on Prizes and Awards has awarded the 2024 Sacks Prize jointly to Dr. Erfan Khaniki for the thesis (Im)possibility results in Proof Complexity and Arithmetic at the Mathematical Institute of the Czech Academy of Sciences; and Dr. Nicholas Pischke for the thesis Proof-Theoretical Aspects of Nonlinear and Set-Valued Analysis at the Technische Universität Darmstadt.

Here are the citations by the Committee:

Khaniki's thesis makes substantial contributions in proof complexity and to the model theory of intuitionistic logic. He employs a wide array of complex techniques including expander graphs, Nisan-Wigderson pseudo-random generators, interactive proofs, bijective proofs, pigeonhole methods, and probabilistic methods in powerful new ways. One result from this thesis solves a 40-year-old question by constructing Kripke models of PA where not all worlds are models of PA. In proof complexity, other results prove sharp bounds on various proof systems generalizing results by leading experts in the areas, as well as proving novel lower bounds; particularly in DAG-type resolution.

Pischke's research resides in the area of 'proof mining' rooted in Kreisel's pioneering proof-theoretic ideas of 'unwinding proofs' to extract finitary and combinatorial content from proofs that employ highly infinitary means. The main logical tools are novel and vast expansions of Gödel's functional interpretation. His dissertation *Proof-Theoretical Aspects of Nonlinear and Set-Valued Analysis* develops new and far-reaching extensions of the proof mining program, notably logical meta-theorems and striking applications to convex optimization and nonlinear analysis, focusing on set-valued operators. To point out a few, it yields for the first time meta-theorems germane to the treatment of nonlinear semigroups of operators, dual Banach spaces, strongly nonexpansive mappings, maximally monotone operators in Banach spaces, and Hausdorff distances in the context of set-valued mappings.

• 2025 Sacks Prize. The ASL invites nominations for the 2025 Sacks Prize for the most outstanding doctoral dissertation in mathematical logic. Nominations must be received by September 30, 2025. The Sacks Prize was established to honor the late Professor Gerald Sacks of MIT and Harvard for his unique contribution to mathematical logic, particularly as adviser to a large number of excellent Ph.D. students. The Prize was first awarded in 1994 and became an ASL Prize in 1999. The Fund on which the Prize is based is now administered by the ASL and the selection of the recipient is made by the ASL Committee on Prizes and Awards. The Sacks Prize will consist of a cash award plus five years free membership in the ASL. For general information about the Prize, visit http://aslonline.org/other-information/prizes-and-awards/. Anyone who wishes to make a nomination for the 2025 Sacks Prize should consult the webpage http://aslonline.org/other-information/prizes-and-awards/sacks-prize-recipients/sacks-prize-nominations/ for the precise details of the application process. A brief summary of the procedure is provided here.

Students who defend their dissertations (equivalent to the American doctoral dissertation) between October 1, 2024, and September 30, 2025, are eligible for the Prize this year. This is an international prize, with no restriction on the nationality of the candidate or the university where the doctorate is granted. Nominations should be made by the thesis advisor, and consist of: name of student, title and 1–2 page description of dissertation, date and location of the thesis defense, letter of recommendation from the advisor, an electronic copy of the thesis in pdf form, or the address of a website from which an electronic copy in pdf form can be downloaded, and an

independent second letter of recommendation. Nominations and questions about the Prize should be sent to the Committee Chair, Jouko Väänänen; pdf files sent as attachments by email to jouko.vaananen@helsinki.fi are preferred. The form of such letters and other pertinent details can be found at the website above and need to be read prior to submitting a nomination.

Those wishing to contribute to the Sacks Prize Fund may send contributions to the ASL Business Office (see address at the top of this Newsletter). All such contributions are tax-deductible within the USA.

• ASL membership renewal for 2025. Online renewal for 2025 is available at https://www.cambridge.org/core/membership/asl. Additionally, paper renewal forms are available at http://aslonline.org/membership/individual-membership/, that can be returned by snail mail or email. Members have the option to choose, for each of our three journals individually, whether to receive print copies or only to have online access to the journal. We encourage everyone to consider the environment and to request print copies only if truly needed. For those who hold multi-year memberships and wish to confirm the expiration date, please log in to your account with Cambridge University Press or send email to USmemberservices@cambridge.org.

We encourage all those whose memberships expired in 2024 to renew their memberships in a timely fashion! Many logicians, when becoming members of the ASL, opt out of receiving email from Cambridge U.P., which administers the membership program. In such cases, due to European Union regulations regarding opting-out, these members may not receive any electronic notification of the expiration of their memberships, and we know of cases where memberships have lapsed simply because the member was unaware of the expiration date. We believe that we have a better system in place now, still conforming to the EU regulations, but members who may have opted out of email should still pay particular attention and be sure to renew promptly.

- Links to Articles. For the convenience of our members, the e-mail edition of this Newsletter includes an attachment providing titles of many articles currently in press for the *Journal of Symbolic Logic*, *Review of Symbolic Logic*, and *Bulletin of Symbolic Logic*, along with active links for downloading them from our journal websites. The attachment is also available at https://aslonline.org/other-information/617-2/.
- Open-Access Options for ASL Journals. Authors of research articles in logic, who may wish to consider submitting those articles to the *Bulletin of Symbolic Logic*, the *Journal of Symbolic Logic*, or the *Review of Symbolic Logic*, should be aware that these journals now offer the option of open-access publication. Indeed, many universities now have contracts with Cambridge University Press, our publisher, that allow their researchers to publish open-access articles at no charge. These are often called *read-and-publish* or *transformative agreements*.

All three journals are now hybrid. They still accept article submissions exactly as before, and they will still publish accepted articles just as before if the author does not opt for open access. However, for authors with mandates to publish open-access articles (or who simply prefer to do so), this option is also available. Details appear at https://www.cambridge.org/core/services/open-access-policies. To ascertain whether your university is among those with an agreement as described above, use https://www.cambridge.org/core/services/open-access-policies/read-and-publish-agreements.

- ASL Sponsorship of Meetings. The ASL often sponsors research meetings and conferences in logic, all over the world. Sponsorship is granted to those meetings that uphold high standards of scholarship and rigor and whose purpose is in concert with the mission of the ASL. Student members of the ASL may apply to the ASL for travel support to attend sponsored meetings, as described below, and a report on each sponsored meeting subsequently appears in the *Bulletin of Symbolic Logic*. Meeting organizers who are ASL members and wish to request ASL sponsorship of their meetings should do so at least five months before the beginning of the meeting, following the instructions at http://aslonline.org/sponsorship-of-meetings/.
- Call for Conference Proposals. The Committee on Logic in Europe seeks proposals for hosting the Logic Colloquium in early summer 2026. Inquiries should be sent to the chair: andrew.arana@univ-lorraine.fr.

The ASL Committee on Logic in North America requests proposals for the 2027 ASL North American Annual Meeting, to be held some time during the first five months of 2027. The committee seeks a university in North America and a local committee to host the meeting and handle the local arrangements. The ASL meetings ordinarily cycle geographically between midwest (Ames, IA 2024), west (Las Cruces, New Mexico 2025), and

east (Philadelphia, PA 2026). Thus, for 2027, the committee seeks a location in the midwest. However, any reasonable proposal will be considered. For more information, interested parties should contact Dima Sinapova, the Committee Chair (email: dima.sinapova@rutgers.edu), ideally no later than June 30, 2025.

STUDENT TRAVEL AWARDS

• Student Travel Awards: ASL and ASL-Sponsored Meetings. Student members of the ASL may apply for travel grants to ASL and ASL-sponsored meetings, as identified in the listings below. To be considered for a travel award, please (1) send a letter of application, and (2) ask your thesis supervisor to send a brief recommendation letter. The application letter should be brief (preferably one page) and should include: (1) your name; (2) your home institution; (3) your thesis supervisor's name; (4) a one-paragraph description of your studies and work in logic, and a paragraph indicating why it is important to attend the meeting; (5) your estimate of the travel expenses you will incur; and (6) (voluntary) indication of your gender and minority status. Women and members of minority groups are strongly encouraged to apply. Application by email is encouraged; put "ASL travel application" in the subject line of your message.

The deadline for the 2025 Logic Colloquium is April 15, 2025, and that for the 2025 North American Annual Meeting has passed. For these two meetings, applicants need not be members of the ASL. The Logic Colloquium and the North American Annual Meeting are partially supported by funding from the National Science Foundation of the USA. For the Logic Colloquium, these NSF funds may be awarded only to students at USA universities and to citizens and permanent residents of the USA. (Other applicants are funded from the ASL's own budget.) Air travel paid for using NSF funds must be in accordance with the Fly America Act.

For all other ASL and ASL-sponsored meetings, student membership in the ASL is a prerequisite for travel grant applications. These applications and accompanying recommendations should be submitted via email to asl@uconn.edu or to the ASL Business Office (ASL, Dept. of Mathematics, Univ. of Connecticut, 341 Mansfield Road, U-1009, Storrs, CT 06269-1009, USA). They must be received at least three months prior to the start of the meeting. Decisions will be communicated at least two months prior to the meeting.

Official ASL meetings include the Logic Colloquium, the North American Annual Meeting, the Simposio Latino Americano de Lógica Matemática, the Asian Logic Conference, the ASL Winter Meeting, and the ASL-APA annual joint meeting. Many other logic meetings are sponsored by the ASL; a list of these appears below, followed by a further list of other upcoming meetings in logic.

ASL MEETINGS

• North American Annual Meeting May 13-16, 2025, Las Cruces, New Mexico, USA. The 2025 ASL North American meeting will be held at New Mexico State University. The plenary speakers will be S. Artemov, B. Castle, P. Lutz, M. Malliaris, A. Poveda, and F. Weilacher, with tutorials presented by J. Wolf and M. Soskova. Special sessions (with organizers in parentheses) are planned in Combinatorics and Logic (A. Chernikov, D. Dzhafarov, and A. Marks); Computability Theory (M.C. Ho and M. Valenti); Modal Logic (W. Holliday and I. Shapirovsky); Model Theory (G. Conant and N. Ramsey); Proof Assistants (P. Johann and J. Weinberger); and Set Theory (C. Conley and D. Sinapova). The Program Committee consists of U. Andrews, V. de Paiva, I. Shapirovsky, C. Terry, and S. Thomas (chair), while the Organizing Committee includes J. Harding (chair), A. Kornell, J. Lucero-Bryan, P. Morandi, B. Olberding, I. Shapirovsky, and S. Tran. The meeting website is https://math.nmsu.edu/asl-2025/index.html, and preregistration is available until May 1, 2025 at https://aslonline.org/na-meeting-registration/. The preliminary program will be available shortly at https://aslonline.org/meet.

The deadlines for contributed talk submissions and student travel applications have passed. We note that the ASL-sponsored meeting *Logicon*, described below, will take place in Mexico City shortly after this conference.

• Logic Colloquium (European Summer Meeting) July 7–11, 2025, Vienna, Austria. The 2025 Logic Colloquium will be hosted by the Technische Universität Wien. J. Bagaria will deliver the 2025 Gödel Lecture.

B. Afshari, U. Buchholtz, T. Colcombet, S. Gandon, P. Lutz, M. Malliaris, S. Shelah, B. Siskind, and S. Smets will also give plenary talks, and D. Sinapova and H. Towsner will present tutorials. The meeting will include special sessions (with organizers in parentheses) in Computability (L. Bienvenu & P. Shafer); Condensed Math (J. Bergfalk & C. Lambie-Hanson); Model Theory (J. Kirby & A. Martin-Pizarro); Philosophy (V. De Risi, J. Kennedy, & D. Rabouin); Proof Theory (M. Baaz & S. Hetzel); and Set Theory (V. Fischer, A. Panagiotopoulos, & F. Schlutzenberg). Updated information is available online at https://www.colloquium.co/lc2025. Also see below for the details of the Shelah birthday conference, to be held the following week in the same location.

The Program Committee consists of J. Aguilera, M. Bojańczyk, N. Gambino, N. Gierasimczuk, R. Iemhoff, J. Kennedy (chair), S. Müller, D. Palacin, L. Patey, and A. Villaveces. The Organizing Committee is chaired by J. Aguilera and co-chaired by M. Baaz. The deadline for both contributed abstracts and student travel grant applications is April 15, 2025. Abstracts should conform to the ASL *Rules for Abstracts* (see below) and should be sent to Shannon Miller at asl@uconn.edu. Travel grant applications and recommendations should be sent to the same address, following the instructions above for student travel awards.

• Asian Logic Conference September 8–12, 2025, Kyoto, Japan. The biennial Asian Logic Conference is planned to be held at Kyoto Sangyo University. The plenary speakers include A. Chernikov, S. Gao, F. Liu, T. Nemoto, and K. Terui. The meeting website will be available soon. In the meantime, for updated information, please visit https://aslonline.org/meet/.

The Program Committee consists of M. Banerjee, L. Ding, N. Greenberg, T. Kihara, K.M. Ng, D. Raghavan, K. Sano, K. Takeuchi, T. Usuba, and K. Yokoyama (chair). The Organizing Committee consists of J. Brendle (co-chair), S. Katsumata, A. Kawamura, M. Kikuchi, H. Miyoshi (co-chair & local chair), and K. Yokoyama.

• Rules for Abstracts. The rules for abstracts of contributed talks at ASL meetings (including those submitted "by title") may be found at aslonline.org/rules-for-abstracts/. Please note that abstracts must follow the rules as set forth there; those which do not conform to the requirements will be returned immediately to the authors who submitted them. Revised abstracts that follow the rules will be considered if they are received by the announced deadline.

ASL SPONSORED MEETINGS

- Logicon May 19-21, 2025, Mexico City, Mexico. Logicon, hosted by the Facultad de Ciencias of UNAM, will focus on set theory, logic, and related areas. The local organizers are I. Barrón Jimenez, J.J. Valenzuela Morales, and M. Torres Ruiz. More information is available at https://logicon.mx/2024/08/20/logicon-mmxxv-2025/.
- Model Theory of Tame Expansions of Topological Fields May 21–23, June 23–26, & July 14–18, 2025, Naples, Italy. This series consists of three events: a mini-workshop in May, a summer school in June, and a conference in July, all at the University of Naples Federico II. They will focus on tame real analytic functions, quasiminimal expansions of algebraically closed fields, tame differential algebra, and valued fields and Henselminimality. The organizers are S. Eterović, A. Fornasiero, S. L'Innocente, V. Mantova, O.L. Sánchez, and G. Terzo. More details appear at https://naplesmodeltheory2025.github.io/.

The first registration deadline is April 1. The deadline for applying for ASL student travel grants is three months prior to the event in which you will participate. If you will attend more than one of the three, please send a single travel grant application for all your participation, by the deadline for the first event you will attend.

• Computability, Complexity, and Randomness June 16–20, 2025, Bordeaux, France. This year's edition of CCR will be colocated with the annual meeting of the French community in computability and related topics ("Journées Calculabilités"). The focus is mainly on algorithmic information theory, randomness, and their impact on mathematics. The invited speakers are E. Mayordomo, J. Miller, K. Miyabe, R. Santhanam, and A. Sorbi, and the Program Committee is co-chaired by L. Bienvenu and P. Shafer. Participants should register at https://ccr2025.sciencesconf.org/ by April 30, which is also the deadline for abstract submission.

- 30th Workshop on Logic, Language, Information and Computation July 14–17, 2025, Porto, Portugal. WoLLIC is an annual international forum on interdisciplinary research involving formal logic, computing and programming theory, and natural language and reasoning. WoLLIC 2025 will be hosted by the Department of Computer Science in the Faculty of Sciences of the University of Porto. The Programme Committee is chaired by D. Kozen, while S. Alves and M. Florido co-chair the Organizing Committee. More information is available through https://wollic2025.github.io/.
- Computability in Europe July 14–18, 2025, Lisbon, Portugal. CiE 2025 will take place on the campus of the Faculdade de Ciências of the Universidade de Lisboa. Tutorials will be offered by M. Bonacina and I. Oliveira, and the invited speakers are U. Dal Lago, D. Graca, E. Komendantskaya, K.M. Ng, P. Oliva, and A. Sokolova. Special sessions are planned in Computable Analysis and Topology; Computability Aspects of Descriptive Set Theory; Human-Centered AI; Proof Complexity and SAT; Proof Theory; and Quantum Computing. A. Beckmann and I. Oitavem chair the Programme Committee. For details please visit https://sites.google.com/view/cie2025-computabilityineurope/home.
- Logic, Algebra, and Truth Degrees July 21–25, 2025, Siena, Italy. The LATD conference series fosters collaboration between researchers in algebraic logic and related areas, including proof theory, computational complexity, and modal formalisms. At this year's meeting, invited talks will be given by M. Busaniche, M. Droste, W. Fussner, M. Girlando, and T. Kowalski. The Program Committee consists of P. Aglianò, G. Metcalfe, S. Negri, C. Noguera, A. Palmigiano, A. Přenosil, S. Ugolini, and A. Vidal. Please visit https://www.congressi.unisi.it/latd25/ for more details.
- Conference for Jörg Brendle's 60th birthday September 1-5, 2025, Kobe, Japan. This conference is organized by D. Mejía, H. Minami, H. Sakai, and T. Yorioka, and will be held at Kobe University during the week immediately before the Asian Logic Conference in Kyoto (see above). Updated information is available at https://sites.google.com/view/brendle60/.
- Young Set Theory 2025 September 8-12, 2025, TU Wien, Vienna, Austria. This meeting is aimed at young researchers in set theory, offering tutorials by J. Kennedy, C. Lambie-Hanson, P. Lücke, and F. Schlutzenberg, in addition to plenary talks by C. Agostini, B. De Bondt, A. Fatalini, S. Thei, and J. Zhang. Further details are available at https://www.colloquium.co/yst2025.
- CICM & LSFA October 6-11, 2025, Brasilia, Brazil. The 18th Conference on Intelligent Computer Mathematics (CICM 2025) and its satellite event, the 20th Symposium on Logical and Semantic Frameworks with Applications (LSFA 2025), will take place in Brasilia. Details are available at https://cicm-conference.org/2025/cicm.php and https://lsfa-workshop.github.io/2025/.
- 2025 Annual Meeting of the Australasian Association for Logic November 3-7, 2025, Brisbane, Australia. The annual conference of the AAL will be held in a hybrid format, with its in-person activities at the University of Queensland. The invited speakers will include M. Jackson, A. Melnikov, A. Nies, and D. Pattinson, and the organizing committee consists of G. Badia, S. Rubin, T. Kowalski, and S. Standefer. Abstracts of contributed talks may be submitted until September 5, 2025. Please see the details available at https://sites.google.com/view/aalogic/aal-conference-2025?authuser=0.

CALENDAR OF OTHER MEETINGS

- Northeast Model Theory Day '25 April 5, 2025, Towson, MD, USA. This one-day meeting, hosted at Towson University, is the second in an annual series. The invited speakers are A. Kruckman, C. Laskowski, A. Papadopoulos, R. Patel, and H. Towsner. All are welcome, and limited travel support is available through the MAMLS NSF grant. For registration and information, please visit https://nemtd.wescreates.wesleyan.edu/.
- XXI Brazilian Logic Conference (EBL) May 12–16, 2025, Serra Negra, São Paulo State, Brazil. The Encontro Brasileiro de Lógica, begun in 1979, is organized by the Brazilian Logic Society. This year the plenary speakers include N. Alechina, V. Becher, M. Busaniche, C. di Prisco, R. Jansana, F. Miraglia, S. Montenegro

- Guzman, C. Mortari, A. Ozaki, G. Secco, M. Silva, and S. Veloso. The Scientific Committee is co-chaired by M. Coniglio, I. D'Ottaviano, and B. Lopes Vieira, Before the conference, a Logic School is to be held on May 9-11, 2025, at the University of São Paulo, aimed at graduate and undergraduate students interested in logic. Details about both the Conference and the School appear at https://ebl2025.ime.usp.br/home.
- Graduate Logic Summer School June 30-July 18, 2025, Singapore. The Institute for Mathematical Sciences and the National University of Singapore will present this summer school for graduate students and postdocs interested in logic. A. Pillay, T. Slaman, and H. Woodin will each deliver one week of lectures. For further details please see https://ims.nus.edu.sg/events/sslogic2025/.
- Shelah 80th Birthday Conference and VOrST July 14-18, 2025, Vienna, Austria. There will be a two-day birthday conference for Saharon Shelah in Vienna on July 14-15, followed by an informal workshop officiated by the celebrant in the role of "Vienna Oracle of Set Theory" (July 16-18). Details, including the list of speakers, appear at https://www.dmg.tuwien.ac.at/fb8/2025\protect\relax\$\@@underline{\hbox{}}\mathsurround\z@\$\relaxShelah.html. The organizers are M. Goldstern and J. Kellner. The conference is preceded by the 2025 Logic Colloquium (July 7-11; see above).
- Journées sur les Arithmétiques Faibles (Weak Arithmetics Days) September 8-10, 2025, Prague, Czech Republic. JAF 44 will be hosted by the institute of Mathemaics of the Czech Academy of Sciences. As always, it focuses on proofs in arithmetic with restricted axiom sets. Abstracts for contributed talks are due by June 2, and some travel support for students is available; see the details at https://workshop.math.cas.cz/JAF44/. To register, send email to Neil Thapen (thapen@math.cas.cz).
- Polish Congress of Logic September 22–26, 2025, Toruń, Poland. This meeting is to be hosted by the Nicolaus Copernicus University in Toruń. It will include workshops and symposia on Relating Logic; Mechanisms and Causes; Languages and Logics of Syllogistics; and Non-Fregean Logics. Further details will be available at https://logika.net.pl/pcl/.
- 10th International Conference on Logic, Rationality and Interaction October 16-19, 2025, Xi'an, China. The International LORI conference series aims at bringing together researchers working on a wide variety of logic-related topics that concern the understanding of rationality and interaction. The series also aims at fostering a view of logic as an interdisciplinary endeavour and supports the creation of an East Asian community of interdisciplinary researchers. LORI-10 will be held at Xi'an Jiaotong University in Xi'an, China, on October 16-19, 2025. The PC chairs are C. Shi and V. Goranko, and the organising committee chairs are W. Wang and X. Ding. For more detailed information and the call for papers, visit golori.org/lori2025/.

IN MEMORIAM

Memorials for Zoé Chatzidakis (1955–2025), Wolfram Pohlers (1943–2024), and Krister Segerberg (1936-2025) appear in an attachment to electronic copies of this Newsletter. The attachment is also available at https://aslonline.org/other-information/617-2/.

OTHER ANNOUNCEMENTS (Also see aslonline.org/announce/.)

• Ph.D. Abstracts in the *Bulletin of Symbolic Logic*. Since 2018, the *Bulletin of Symbolic Logic* has published abstracts of recent Ph.D. theses in logic. Sandra Müller is the editor for this section of the *BSL*. Please visit aslonline.org/journals/the-bulletin-of-symbolic-logic/logic-thesis-abstracts-in-the-bulletin-of-symbolic-logic/ for further information or to inform the editor of a newly completed dissertation.

The next newsletter will be mailed in September 2025. Items to be included should reach the Secretary-Treasurers or asl@uconn.edu by August 31, 2025.

Submitted by Russell Miller & Reed Solomon, co-Secretary-Treasurers.