Association for Symbolic Logic

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ASL NEWSLETTER

September 2018

• In memoriam: Vladimir Uspensky.

Vladimir Andreevich Uspensky passed away on June 27, 2018 in Moscow at the age of 87. He was a Distinguished Professor and the head of the Kafedra [or Program] of Mathematical Logic and Theory of Algorithms in the Mathematics Department of Moscow University.

A student of Andrei N. Kolmogorov, Vladimir Andreevich was a person of broad intellectual interests which included mathematical logic and philosophy of mathematics, linguistics, education, cultural history, and many other areas. After completing his Ph.D. "Operations on Recursively Enumerable Sets" in 1955, Vladimir Andreevich joined the Mathematics faculty at Moscow University and spent his entire career there.

In addition to deep foundational results in the theory of algorithms, theory of numberings, and philosophy of mathematics, Vladimir Andreevich authored a number of popular expository books, brochures, and articles aimed at reaching out to non-logic and non-mathematical audiences. His book *The Apology of Mathematics* received, in 2010, the Russian national "Enlightener" award in the field of natural and exact sciences. In mathematics, Vladimir Andreevich supervised 25 successful Ph.D. dissertations: his students include professors Georgi Gargov, Vladimir Kanovei, Vassily Lyubetsky, Elena Nogina, Nikolay Vereshchagin, Vladimir Vyugin, and other logicians.

Uspensky's true passion was linguistics, to which he contributed through original, logic-inspired research and by a fundamental organizational effort in the founding of the Structural Linguistics (now Theoretical and Applied Linguistics) specialization at Moscow University. He is deeply respected by the Russian linguistic community.

Vladimir Andreevich became a famous figure in Moscow cultural life at large – a frequent speaker and popular contributor to leading intellectual journals. His five-volume collection of essays *Works on non-mathematics* covers his diverse areas of interest and several decades of Russian cultural life that he witnessed and in which he was an active participant.

Vladimir Andreevich is survived by his son Vladimir Uspensky Jr., a prominent topologist, currently a professor at Ohio University, and grandson Andrey, a graduate of NYU.

Vladimir Andreevich Uspensky will be thoroughly missed by his family, numerous students, friends, and colleagues.

• The 2018 ASL Election. At the end of this year the ASL will elect its President, its Vice President, two members of the Executive Committee, and two members of the Council. All terms are for three years beginning January 1, 2019. The 2018 Nominating Committee has nominated Julia Knight (Notre Dame), the current Vice President, for President; Phokion Kolaitis (Santa Cruz) for Vice President; Denis Hirschfeldt (Chicago) and Andrés Villaveces (Bogotá) for the Executive Committee positions; and Andreas Weiermann (Ghent) and Agata Ciabattoni (Vienna) for the Council positions. The Nominating Committee consisted of Veronica Becher, Michael Benedikt, Joerg Brendle, Maryanthe Malliaris, Paolo Mancosu, Michael Rathjen, Richard Shore, Charles Steinhorn, Alasdair Urquhart (chair), and Alex Wilkie.

Additional nominations may be made by petition signed by 20 or more ASL members; such petitions should be received by the ASL Secretary-Treasurer (email asl@uconn.edu or ASL, Department of Mathematics, University of Connecticut, 341 Mansfield Road, U-1009, Storrs, CT 06269-1009, USA) no later than November 1, 2018. In a contested election, each candidate has the opportunity to make a 100-word statement to be distributed with the ballot.

• 2017 Sacks Prize Awarded Jointly to M. Harrison-Trainor and S. Vasey. The ASL Committee on Prizes and Awards has selected Matthew Harrison-Trainor of Victoria University, Wellington and Sebastien Vasey of

Harvard University to receive the 2017 Sacks Prize. The prize consists of a cash award and five years membership in the ASL for each awardee.

Matthew Harrison-Trainor received his Ph.D. in 2017 from the University of California, Berkeley under the direction of Antonio Montalbán. In his thesis, *The complexity of countable structures*, Harrison-Trainor established many very strong theorems in computable structure theory. Of these results two stand out. His full description of the Scott spectrum of a theory was a very surprising general result whose proof settled several open problems including ones raised by Marker, Sacks and Montalbán. The second provides a thorough analysis of degree spectra and degrees of categoricity on cones. It shows that the behaviors of these notions are natural in the sense of relativizing to all degrees above some fixed one.

Sebastien Vasey received his Ph.D. in 2017 from Carnegie Mellon University under the direction of Rami Grossberg. In his thesis, *Superstability and categoricity in abstract elementary classes*, Vasey undertook a deep and sustained study of classification theory for abstract elementary classes. Among the many theorems he proved, his eventual categoricity theorem for universal classes is recognized as a landmark achievement towards Shelah's conjecture generalizing Morley's theorem on uncountable categoricity to abstract elementary classes. A second remarkable result is his classification of the stability spectrum for tame AEC's, which may well pave the way for connections with, and applications to, other areas of mathematics.

- 2018 Leelavati Prize Awarded to Ali Nesin. The Leelavati Prize, awarded by the International Mathematical Union, recognizes outstanding contributions for increasing public awareness of mathematics as an intellectual discipline and the crucial role it plays in diverse human endeavors. The 2018 Leelavati Prize was awarded to Ali Nesin at the ICM in Rio de Janeiro in recognition of his outstanding contributions and great achievements towards increasing public awareness of mathematics in Turkey, especially because of his tireless work in creating and developing the "Mathematics village" as an exceptional, peaceful place for education, research and the exploration of mathematics for a wide range of people.
- Call for Nominations: 2018 Sacks Prize. The ASL invites nominations for the 2018 Sacks Prize for the most outstanding doctoral dissertation in mathematical logic. Nominations must be received by September 30, 2018. The Sacks Prize was established to honor 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://www.aslonline.org/info-prizes.html.

Anyone who wishes to make a nomination for the 2018 Sacks Prize should consult the webpage http://www.aslonline.org/Sacks_nominations.html for the precise details of the application process. A brief summary of the procedure is provided below.

Students who defend their dissertations (equivalent to the American doctoral dissertation) between October 1, 2017, and September 30, 2018, 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 adviser, 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 incoming Committee Chair, Justin Moore; pdf files sent as attachments by email to justin@math.cornell.edu 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. Correspondence should be addressed to Justin Moore, Department of Mathematics, Cornell University, Ithaca, NY 14853 USA.

Those wishing to contribute to the Sacks Prize Fund may send contributions to the ASL office (ASL, Department of Mathematics, University of Connecticut, 341 Mansfield Road, U-1009, Storrs, CT 06269-1009, USA); All such contributions are tax-deductible within the USA.

• Call for Nominations: 2019 Shoenfield Prizes. The ASL invites nominations for the Shoenfield Prizes for outstanding expository writing in the field of logic. There are two Shoenfield prizes, one for books and one for expository articles, each to be awarded simultaneously every three years. The Shoenfield Prizes were first awarded in 2007. Any book first published in the past 9 years may be considered for the book award. Any article published in the past 6 years may be considered for the article award. Nominations should be submitted to Justin Moore (justin@math.cornell.edu), the incoming Chair of the ASL Committee on Prizes and Awards. The deadline for nominations for the 2019 Prizes is November 1, 2019.

The Shoenfield prizes were established by the ASL to honor the late Joseph R. Shoenfield for his many outstanding contributions to logic and to the ASL. Generations of logicians have especially valued Shoenfield's expository gifts, and his writings provide models of lucidity and elegance. The fund on which the Prize is based is administered by the ASL and the award is made by the Association upon the recommendation of the ASL Committee on Prizes.

- ASL Secretary-Treasurer and Office Transition. Charles Steinhorn stepped down as ASL Secretary-Treasurer on May 31, 2018, and the ASL Administrator, Fran Whitney, retired at the end of April 2018. Each had served in those roles for over fifteen years. The ASL Council approved the appointment of Russell Miller (CUNY) and Reed Solomon (Connecticut) to share the Secretary-Treasurer duties for the remainder of Steinhorn's term that ends on January 1, 2020. Thereafter, Miller and Solomon will be eligible for election to (renewable) 3-year terms. The ASL office has moved from Vassar to the University of Connecticut, and Shannon Miller has been hired as the new ASL Administrator. The new ASL office email address is asl@uconn.edu; the new postal address is: ASL, Department of Mathematics, University of Connecticut, 341 Mansfield Road, U-1009, Storrs, CT 06269-1009, USA. The new telephone number is: 1-860-486-3989, and the new fax number is 1-860-486-4238.
- Call for Proposals: 2020 AMS-ASL Joint Special Session. The ASL Committee on Logic in North America seeks proposals for an AMS-ASL Joint Special Session to be held at the Joint Mathematics Meetings in Denver, Colorado, January 15–18, 2020. Proposals or requests for information should be sent to the Committee Chair, Natasha Dobrinen (natasha.dobrinen@du.edu). The deadline for receipt of proposals is January 7, 2019.
- Call for Proposals: 2021 North American Annual Meeting. The ASL Committee on Logic in North America requests proposals for the 2021 ASL North American Annual meeting to be held some time during the first five months of 2021. The committee seeks a university somewhere in North America and a local committee to host the meeting and handle the local arrangements. The ASL meetings ordinarily cycle geographically between midwest (Macomb 2018), east (New York City 2019) and west (Irvine 2020). Thus, for 2021, the committee seeks a location in the midwest. However, any reasonable proposal will be considered. For more information, interested parties should contact the Committee Chair, Natasha Dobrinen (email: natasha.dobrinen@du.edu), no later than November 15, 2018.
- Discounted Dues for New ASL Individual Members. The ASL offers a 50% discount on dues for new individual members during each of the first two years of membership. For more information, visit http://www.aslonline.org/membership-individual.html.
- Free Individual ASL Membership Program for Individuals in Developing Economies. The ASL invites applications for an initial two-year free membership in the Association for new and lapsed members from countries classified as developing economies. The list, found at http://www.aslonline.org/worldbankeconomies.html includes Brazil, Bulgaria, China, Colombia, India, Iran, South Africa, and many other countries classified as 'upper middle income' or below on the World Bank's annual list for four of the last five years. To apply, please send an email to the ASL Committee on Membership at asl-membership@googlegroups.com. Include your name, full mailing address, and your academic affiliation. For information about the ASL and membership benefits, visit http://www.aslonline.org/membership-individual.html. After the initial two-year period new members under this program will pay the reduced membership dues, currently at US\$18, as long as their country of residence is on the ASL's list of developing economies (see http://www.aslonline.org/worldbankeconomies.html).

- Reduced Dues for Individuals and Institutions in Developing Economies. The ASL offers reduced dues for individuals and institutions in developing economies. For 2018, the reduced dues are US\$18 for individuals and US\$130 for institutional basic membership, US\$180 for full membership. These dues apply to individuals and institutions in countries whose economies are classified as 'upper middle income' or below on the World Bank's annual list for four of the last five years. For more information, visit http://www.aslonline.org/membership_outreach.html or contact the ASL Business Office: ASL, Department of Mathematics, University of Connecticut, 341 Mansfield Road, U-1009, Storrs, CT 06269-1009, USA. Tel: 1-860-486-3989; Fax: 1-860-486-4238; email: asl@uconn.edu.
- New ASL Books. To see all new books in the ASL's *Lecture Notes in Logic* and *Perspectives in Logic* series, visit http://www.aslonline.org/books-lnl-available.html for LNL volumes and http://www.aslonline.org/books-perspectives_cup_springer.html for Perspectives volumes.
- Book and Journal Discounts for ASL Members. Several publishers offer discounts on books and journals to ASL members. For a detailed description of these discounts, visit http://www.aslonline.org/members-discounts.html, or write to the ASL Business Office.

ASL MEETINGS

• Student Travel Awards: The 2019 ASL North American Meeting and other ASL or ASL-Sponsored Meetings. The ASL will make available modest travel awards to graduate students in logic so that they may attend the 2019 ASL North American Annual Meeting at the CUNY Graduate Center in New York City. Student members of the ASL may apply for travel grants to other ASL or ASL-sponsored meetings. 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; (6) (for citizens or residents of the USA) citizenship or visa status; and (7) (voluntary) indication of your gender and minority status. Women and members of minority groups are strongly encouraged to apply. In addition to funds provided by the ASL, the program of travel grants is supported by a grant from the US National Science Foundation; NSF funds for meetings outside of North America may be awarded only to students at USA universities and to citizens and permanent residents of the USA. Air travel paid for using NSF funds must be in accordance with the Fly America Act. Application by email is encouraged; put "ASL travel application" in the subject line of your message.

For the 2019 ASL North American Annual Meeting, applications and recommendations should be received before the deadline of February 15, 2019 by the Program Chair Wesley Holliday, email wesholliday@berkeley.edu. Applications may only be submitted by email.

For ASL student member travel grants to ASL or ASL-sponsored meetings (other than the North American Annual Meeting and the European Summer Meeting), applications and recommendations must be received at least three months prior to the start of the meeting at the ASL Business Office: ASL, Department of Mathematics, University of Connecticut, 341 Mansfield Road, U-1009, Storrs, CT 06269-1009, USA; Fax: 1-860-486-4238; email: asl@uconn.edu. Decisions will be communicated at least two months prior to the meeting.

2018-19 ASL Winter Meeting (with Joint Mathematics Meetings). January 18–19, 2019, Baltimore, Maryland. This meeting will take place in conjunction with the Joint Mathematics Meetings taking place January 16-19, 2019. The confirmed invited speakers are: N. Dobrinen, D. Cenzer, S. Goncharov, J. Kruger, M.C. Laskowski, D. Marker and J. Marikova. The members of the Program Committee are S. Cox, V. Harizanov (chair), and A. Kolesnikov. The Joint Mathematics Meetings program includes two joint AMS-ASL special sessions: Definability and Decidability Problems in Number Theory, organized by K. Eisentraeger, D. Haskell, J. Park, and A. Shlapentokh; and, Algorithmic Dimensions and Fractal Geometry, organized by J. Lutz and E. Mayordomo. There also will be two AMS special sessions of interest to logicians: Recent Advances and Trends in Computable Structure Theory (in honor of Jeff Remmel), organized by J. Chubb and T. McNicholl, and Recent Advances in Regularity Lemmas, organized by G. Conant, R. Patel, and J. Wolf. Abstracts of contributed talks submitted by ASL members will be published in *The Bulletin of Symbolic Logic* if they satisfy the Rules for Abstracts (see below). Abstracts must be received by the deadline of September 10, 2018, at the ASL Business Office: ASL, Department of Mathematics, University of Connecticut, 341 Mansfield Road, U-1009, Storrs, CT 06269-1009, USA; fax: 1-860-486-4238; email: asl@uconn.edu.

- 2019 ASL Winter Meeting (with APA). February 20-23, 2019, Denver, Colorado. This meeting will be held jointly with the Annual Meeting of the Central Division of the American Philosophical Association. The members of the Program Committee are K. Bimbo (chair), P. Girard, and M. Rossberg. The speakers in the three invited sessions are: Relevance logic, J.M. Dunn, E. Mares and A. Urquhart; Philosophy of mathematics, P. Blanchette, D. Devidi and P. Mancosu; and Modal/intensional logic, N. Gratzl, H. Leitgeb, and G. Restall. Abstracts of contributed talks submitted by ASL members will be published in The Bulletin of Symbolic Logic if they satisfy the Rules for Abstracts (see below). Abstracts must be received by the deadline of September 16, 2018, at the ASL Business Office: ASL, Department of Mathematics, University of Connecticut, 341 Mansfield Road, U-1009, Storrs, CT 06269-1009, USA; fax: 1-860-486-4238; email: asl@uconn.edu.
- 2019 ASL North American Annual Meeting. May 20-23, 2019, New York, New York. The members of the Local Organizing Committee are: E. Antonakos (co-chair), S. Artemov, A. Dolich, S. Friedman (co-chair), G. Fuchs, and J. Hamkins. The members of the Program Committee are S. Buss, J. Franklin, W. Holliday (chair), E. Landry, A. Marks and J. Nagloo. Abstracts of contributed talks submitted by ASL members will be published in *The Bulletin of Symbolic Logic* if they satisfy the Rules for Abstracts (see below). Abstracts must be received by February 15, 2019, at the ASL Business Office, Department of Mathematics, University of Connecticut, 341 Mansfield Road, U-1009, Storrs, CT 06269-1009, USA; fax: 1-860-486-4238; email: asl@uconn.edu.
- Sixteenth Asian Logic Conference. June 17-21, 2019, Nazarbayev University, Astana, Kazakhstan. The invited speakers include S. Badaev, N. Bazhenov, Q. Feng, S. Fuchino, B. Kim, T. Kihara, B. Kulpeshov, D. Kuske, D. Macpherson, A. Pietarinen, T. Usuba and S. Zhiwei. The special sessions are Computability Theory, Model Theory, Set Theory, Logic in Computer Science and Philosophical Logic. The members of the Local Organizing Committee are M. Mustafa and V. Tourassis. The members of the Program Committee are B. Baizhanov, J. Brendle, S.S. Goncharov (chair), G. Wu, K. Ikeda, B. Khoussainov, A. Morozov, H. Ono, Y. Yang and L. Yu. For further information, visit http://www.alc2019.kz or email alc2019@nu.edu.kz.
- 2019 European Summer Meeting (Logic Colloquium '19). August 11–16, 2019, Prague, Czech Republic. The members of the Program Committee are A. Arana, L. Beklemishev (chair), A. Ciabattoni, R. Miller, M. Otto, P. Pudlák, S. Todorčević, and A. Wilkie. The members of the Local Organizing Committee are D. Chodounský (co-chair), P. Cintula, R. Honzík, P. Pudlák, N. Thapen and J. Verner (co-chair). This meeting will be co-located with the 16th CLMPST (see below, under Other Meetings).
- 2020 ASL North American Annual Meeting. March 25–28, 2020, Irvine, California. The members of the Local Organizing Committee are M. Foreman, I. Goldbring (chair), P. Maddy, K. Wehmeier and M. Zeman.
- Rules for Abstracts. The rules for abstracts of contributed talks at ASL meetings (including those submitted "by title") may be found at http://www.aslonline.org/rules_abstracts.html. 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

• Cantor Meets Robinson: Set Theory, Model Theory, and Their Philosophy. December 12–15, 2018, Campinas, Brazil. The topic of the conference is the interplay between set theory and model theory, both from a mathematical and a philosophical perspective, with particular emphasis on forcing. The Program Committee includes: O. Alas, R. Bianconi, C. Brech, M. Dzamonja, W. Hodges, L. Incurvati, T. Meadows, C. di Prisco, and S. Walsh. The local organizers are E. Almeida, E. Bezerra, R. Freire, S. Jockwich, H. Mariano, C. Mortari, B. Ramos, J.V. Schmidt, and G. Venturi (chair). Attendance is free. For organizational reasons registration before November 1, 2018, by email to cantormeetsrobinson@gmail.com, is highly recommended.

- Thirteenth International Conference on Computability, Complexity and Randomness (CCR 2018). December 17-21, 2018, Santiago de Chile, Chile. Topics include: algorithmic randomness, computability theory, computational complexity, Kolmogorov complexity, and reverse mathematics and logic. This year's conference will be partially oriented to explore connections between these topics and the theory of dynamical systems. The invited speakers are: F. Cucker, M. Hoyrup, T. Kihara, B. Kra, N. Lutz, A. Maass, K. M. Ng, and P. Shmerkin. Tutorials will be offered by S. Figueira and A. Gajardo. The Program Committee includes: V. Becher (Co-Chair), M. Braverman, P. Gács, N. Greenberg, A. Montalbán, C. Rojas (Co-Chair), H. Towsner, and L. Westrick. The Local Organizing Committee members are: J. Aliste, V. Becher, and C. Rojas. For more information, visit http://www.mat-unab.cl/~ccr2018/.
- Syntax Meets Semantics (SYSMICS 2019) January 21-25, 2019, Amsterdam, the Netherlands. The 2019 SYSMICS conference will focus on interactions between syntactic and semantic methods in substructural and other non-classical logics. Invited speakers include B. Afshari, G. Bezhanishvili, M. Campercholi, S. Ghilardi, S. van Gool, T. Kroupa, V. de Paiva, and A. Vidal. The lead organizer is N. Bezhanishvili. For more information, visit http://events.illc.uva.nl/SYSMICS2019.
- Eleventh PhDs in Logic Conference. April 24-26, 2019, Mathematical Institute of the University of Bern, Switzerland. This interdisciplinary conference is organized by graduate students and aims to involve graduate students and early postdocs from all over the world. The conference accepts contributions from topics in mathematical logic, philosophical logic, and logic in computer science. It includes tutorials by established researchers as well as short presentations by PhD students, master students, and early postdocs. The organizers are A. Colacito, E. Lehmann, N. Savi, O. Tuyt and A. Novaro. Visit https://mathsites.unibe.ch/phdlogic2019/ for more information. (ASL Sponsored Meeting.)

CALENDAR OF OTHER MEETINGS

- Very Informal Gathering of Logicians at UCLA (VIG 20). February 1-3, 2019, Los Angeles, CA. The 20th in a series of biennial logic meetings at UCLA, this event will celebrate the 50th anniversary of the 1967-68 Logic Year at UCLA and the many influences it had in Mathematical Logic. The invited speakers are J. Moore giving the Hjorth Lecture, J. Knight, K. Krupinski, C. Laskowski, M. Magidor, D.A. Martin, G. Sargsyan, B. Seward, T. Slaman, J. Steel, A. Tserunyan, R. Tucker-Drob, and H. Woodin. For further information about the meeting and travel grants, visit http://www.logic.ucla.edu.
- 15th International Conference of the Mathematics Education for the Future Project, Theory and Practice: An Interface or A Great Divide? August 4-9, 2019, Maynooth University, Kildare, Ireland. The Full Preliminary Announcement and Call for Papers is available at http://directorymathsed.net/public/Ireland/. For further details, email alan@cdnalma.poznan.pl.
- Congress of Logic, Methodology and Philosophy of Science and Technology (16th CLMPST) August 5–10, 2019, Prague, Czech Republic. The 16th CLMPST will take place in Prague, August 5-10, 2019, organized under the auspices of the Division for Logic, Methodology and Philosophy of Science and Technology of the International Union for History and Philosophy of Science and Technology (DLMPST/IUHPST) by the Institute of Philosophy of the Czech Academy of Sciences. This meeting is co-located with the 2019 Logic Colloquium (see above, under ASL Meetings). The initial Call for Papers has been issued with a deadline of December 15, 2018.

The next Newsletter will be sent in November 2018. Items to be included should reach the Secretary-Treasurers before October 31, 2018.

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