Association for Symbolic Logic

BUSINESS OFFICE: ASL, DEPT. OF MATHEMATICS, UNIV. OF CONNECTICUT 341 MANSFIELD ROAD, U-1009, STORRS, CT 06269-1009, USA PHONE: 1-860-486-3989; FAX: 1-860-486-4238; EMAIL: asl@uconn.edu WEB: http://www.aslonline.org

ASL NEWSLETTER

November 2020

- The 2020 ASL Election. Enclosed with this Newsletter is the ballot for the 2020 election for two members of the Executive Committee of the Council and two members of the Council. For those receiving the Newsletter via email, the ballot is included as a pdf attachment. Write-in votes are allowed. All terms are for three years beginning January 1, 2021. The 2020 Nominating Committee has nominated Juliet Floyd (Boston University) and Dima Sinapova (University of Illinois-Chicago) for the Executive Committee positions; and Sebastiaan Terwijn (Radboud University, Nijmegen) and Wei Li (Chinese Academy of Sciences) for the Council positions. The Nominating Committee consisted of Veronica Becher, Lev Beklemishev, Deirdre Haskell, Juliette Kennedy, Michael Rathjen, Ernest Schimmerling, and Alex Wilkie (chair).
- Renewing memberships for 2021. Many logicians, when becoming members of the ASL, opt out of receiving email from Cambridge University Press, which administers the membership program. In such cases, due to European Union regulations regarding opting-out, these members do 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. The ASL is working with CUP to develop a better system, still conforming to the EU regulations. In the meantime, we encourage all those whose memberships in a timely fashion! At http://aslonline.org/membership/individual-membership/, a link is available for online renewal with CUP, and paper renewal forms are also available there that can be returned by snail mail or email. Renewals for the year 2021 should be received starting in late November 2020. For those who hold multi-year memberships and wish to confirm the expiration date, please log in to your account with CUP or send email to USmemberservices@ cambridge.org.

Cambridge University Press is arranging to offer members 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 hope for this to be implemented in time for renewals for 2021; if not, then it will begin with 2022 instead. In any case, once it is implemented, we urge our members to consider the environment and to choose the print option only for those journals which they actually need in hard copy. (To make this new arrangement possible, we have reduced the number of options for the term of membership, which will now be available for either a single year or five years.)

- Mailing of Journals. For some months during the current pandemic, Cambridge University Press was unable to maintain its usual schedule of printing and mailing ASL journals to our members. The mailing of journals has now resumed, but it will take time to work through the backlog and catch up. All journals remain available online to members as always, but the arrival of printed copies still could be significantly delayed. CUP has apologized to the ASL Publisher for the delays, and requests that we all recognize the significant challenges it faces in this extraordinary situation.
- 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 six months before the beginning of the meeting, following the instructions at http://aslonline.org/sponsorship-of-meetings/.

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. 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. Application by email is encouraged; put "ASL travel application" in the subject line of your message.

The Winter ASL Meeting will take place online in January 2021, as part of the Joint Mathematics Meetings. See the entry below (under "ASL Meetings") for special information about student grants for this particular meeting. For all other ASL or ASL-sponsored meetings except the Logic Colloquium and the North American Annual Meeting, applications (from student members of the ASL) and recommendations must be received at least three months prior to the start of the meeting, via email to asl@uconn.edu or at the ASL Business Office (address at the top of this Newsletter). Decisions will be communicated at least two months prior to the meeting.

INFORMATION ON MEETINGS

• Status of scheduled meetings. Under the extraordinary circumstances of the coronavirus and the measures in place to combat it, many logic meetings scheduled for 2020 and 2021 have already been canceled, and it is likely that more will be canceled or postponed. (See below for the change of dates for the North American Annual Meeting!) Information appearing here is current as of the publication of this Newsletter, but ASL members should use the URL given in each item to confirm the ongoing status of any meeting they may consider attending. For completeness, the listings here include short items for canceled meetings.

We urge all logicians to use caution and common sense in planning their schedules, and to avoid unnecessary travel during these unusual times.

• Online logic seminars. To replace canceled meetings and seminars, certain regular online logic seminars have sprung up. A list of existing seminar series with talks available online appears at http://miguelmath.com/webminars.html. Additionally, the site http://lagrange.math.siu.edu/calvert/OnlineLogicSeminar.html has been created to host a new, purely online logic seminar. The site ctaseminar.computability.org hosts an online seminar entitled *Computability Theory and Applications*, and the Logic Supergroup at logic.uconn.edu/supergroup/ runs an online seminar on logic across linguistics, mathematics, and philosophy. Finally, since the ASL North American Annual Meeting of March 2020 was canceled, the Program Committee for that meeting created the webpage http://aslonline.org/virtual-2020-annual-meeting/ with links to audio presentations (with slides) of several talks that would have been presented there.

ASL MEETINGS

- 2021 ASL Winter Meeting (with APA) January 4-7, 2021, New York, NY (virtual). This meeting will be held in conjunction with the Annual Meeting of the Eastern Division of the American Philosophical Association, which was scheduled for New York City, but will now be held virtually. The ASL invited speakers are A. Bacon, E. Cresto, R. French, M. Fusco, H. Lin, and S. Shieh. The members of the Program Committee are G. Russell, G. Sagi (chair), and S. Walsh. Further information can be found at apaonline.org/event/2021eastern. The program is attached to electronic copies of this Newsletter.
- 2020-2021 ASL Winter Meeting (with Joint Mathematics Meetings) January 8–9, 2021, Washington, DC (virtual). This will be held as a virtual meeting in conjunction with the Joint Mathematics Meetings, which take place on January 6-9, 2021. (The JMM, originally scheduled for Washington, DC, will be entirely online

instead.) The invited speakers are D. Bartošová, A. Bernshteyn, G. Conant, B. Csima, R. Miller, C. Rosendal, and C. Steinhorn. A program is attached as a pdf file on electronic copies of this Newsletter. The members of the Program Committee are A. Montalbán (chair), A. Tserunyan and C. Laskowski. Information about the JMM can be found here: http://jointmathematicsmeetings.org/jmm. (Notice that the times listed there are Mountain Standard Time.) In addition, an AMS Special Session on Computability Theory and Effective Mathematics will be held, with morning and afternoon sessions on January 7, 2021, organized by J. Goh, J. Miller, and M. Soskova: see https://www.jointmathematicsmeetings.org/meetings/national/jmm2021/ 2247_program_ss18.html#title.

To participate in the ASL Winter Meeting, mathematicians must register for the entire Joint Mathematics Meetings, as always, at https://www.jointmathematicsmeetings.org/meetings/national/jmm2021/ 2247_reg. Since the JMM is online this year, its organizers have set the registration fees at \$100 for regular members and \$50 for students. Student members of the ASL are welcome to apply for a student travel grant to cover their \$50 registration fee, via email to asl@uconn.edu, following the procedures described above (see "Student Travel Awards"). We expect students who apply for these grants to commit to attending the talks in the ASL Winter Meeting, on January 8-9, and ideally some other talks in the JMM, such as the special session above. Under these special circumstances, the deadline for applying is December 15, 2020.

• 2021 ASL North American Annual Meeting June 22–25, 2021, South Bend, Indiana. Notice the change of dates! This meeting was rescheduled from May 2021, as a result of revisions to the Notre Dame academic calendar. This meeting is currently planned to be held in person at the University of Notre Dame. Please consult aslonline.org/meet for updates.

Plenary speakers will include J. Franklin, M. Gehrke, C. Hill, T. McNicholl, A. Szendrei, N. Trang, and J. Wolf. Tutorials will be presented by J. Moore and R. Moosa. Special sessions are planned in Computability Theory; Model Theory; Non-Classical Logic; Philosophy and History of Mathematics; and Set Theory. The Program Committee consists of G. Bezhanishvili, C. Franks, S. Ng, D. Sinapova, M. Thomas and H. Towsner (chair). The Organizing Committee consists of T. Bays, J. Beall, P. Blanchette, P. Cholak, C. Franks, J. Knight (co-chair), A. Pillay (co-chair), and S. Starchenko.

Abstracts of contributed talks submitted by ASL members will be published in *The Bulletin of Symbolic Logic* if they satisfy the Rules for Abstracts (below). Abstracts must be received by the deadline of March 22, 2021, at the ASL Business Office, preferably by email: asl@uconn.edu. Applications and recommendations for student travel awards must be received by March 22, 2021 by the Program Chair, Henry Towsner, at htowsner@math.upenn.edu.

- 2021 ASL European Summer Meeting (Logic Colloquium) July 19–24, 2021, Poznań, Poland. This conference was originally scheduled for July 13-18, 2020, but was postponed due to the pandemic. It will be hosted by Adam Mickiewicz University in Poznań, and organized by the AMU Faculty of Psychology and Cognitive Science and the AMU Faculty of Mathematics and Computer Science. The members of the Program Committee are W. Buszkowski, A. Dawar, G. Primiero, M. Soskova, H. Towsner, M. Viale, and B. Zil'ber (chair). The Local Organizing Committee consists of W. Buszkowski, J. Golińska-Pilarek, L. Kołodziejczyk, P. Lupkowski, R. Murawski (co-chair), M. Nasieniewski, J. Pogonowski, T. Skura, K. Świrydowicz, M. Urbański (co-chair), and A. Wiśniewski. See https://lc2021.pl/ for further information.
- Rules for Abstracts. The rules for abstracts of contributed talks at ASL meetings (including those submitted "by title") may be found at http://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

• Model Theory Conference in celebration of Ludomir Newelski's 60th birthday December 16–22, 2020, Szklarska Poreba, Poland. This conference has been canceled. The organizers hope to reschedule it in 2022. For

more information, visit http://www.math.uni.wroc.pl/~pkowa/ln20.html.

• 36th Summer Topology Festival July 19-23, 2021, Vienna, Austria. This meeting will have a partial focus on logic, including a special session in set-theoretic topology, The invited speakers include A. Kwiatkowska and M. Magidor. It is hoped that the meeting can be held in person; please consult https://www.univie.ac.at/projektservice-mathematik/e/index.php?event=stc21 for updates.

CALENDAR OF OTHER MEETINGS

- Sao Paulo School of Advanced Science on Contemporary Logic, Rationality, and Information July 13-24, 2020, University of Campinas, Brazil. This School has been postponed, with no rescheduled date yet set. See https://splogic.org/ for updates.
- World Logic Day event January 13-15, 2021, Lima, Peru. This event is organized by the Peruvian Society of Epistemology and Logic, to mark World Logic Day, as proclaimed by UNESCO, on January 14, 2021. It will feature talks and round-table discussions of various areas of logic, and will be the subject of a subsequent special issue of the South American Journal of Logic. The conference website is spel.org.pe/en/wld-2021/, where it will be announced whether the conference is to be held online or in person.
- Workshop zum UNESCO World Logic Day January 14, 2021, Fernuniversität Hagen, Germany. This workshop will mark the World Logic Day. The keynote speaker is I. Vandoulakis. Further information (in German) is available at https://www.fernuni-hagen.de/universitaet/veranstaltungen/ ver-2021-01-14-workshop-world-logic-day.shtml.
- Logik zwischen den Fächern January 15, 2021, Universität Hamburg, Germany (remote). This workshop, held via zoom, will mark the World Logic Day. Speakers include N. Barton, with more expected. Further information (in German) is available at https://www.math.uni-hamburg.de/spag/ml/WLDHH2021/.

IN MEMORIAM

• In memoriam: Michael Morley (1930–2020)

Michael Darwin Morley, aged 90, Emeritus Professor of Mathematics at Cornell University, passed away October 12, 2020. Morley's groundbreaking 1965 paper *Categoricity in Power* was the beginning of modern model theory and laid the foundation for decades of future developments.

Morley was born September 29, 1930 in Youngstown, Ohio and received his B.S. degree in mathematics from Case Institute of Technology in 1951. He began his graduate study at the University of Chicago, under Saunders Mac Lane, and was employed to work on military applications of mathematics at the university's Laboratory for Applied Sciences. His first major work was an independent development, published jointly with Robert Vaught, of the theory of uncountable saturated and special models; Morley then decided to spend a year at Berkeley working under Vaught's supervision. During this period Morley proved Los' conjecture on uncountably categorical theories; he received his Ph.D. from Chicago (formally under Mac Lane) for this work in 1962. Morley continued at Berkeley as Instructor until 1963 when he became an Assistant Professor at the University of Wisconsin. In 1967 he joined Cornell as an Associate Professor. He was promoted to Professor in 1970 and remained at Cornell until his retirement in 2003. Michael's wife Vivienne, also a mathematician, was his constant companion from graduate school until her death in 2013. Morley was President of the Association for Symbolic Logic in 1989–91.

Item continued on separate sheet

In Categoricity in Power, Morley proved that a theory in a countable language is \aleph_1 -categorical if and only if it is κ -categorical for all uncountable κ . In 2003 Morley was awarded the Leroy P. Steele Prize of the American Mathematical Society for Seminal Contribution to Research for this paper. The citation says that he set in motion an extensive development of pure model theory by proving the first deep theorem in this subject and introducing in the process completely new tools to analyze theories and their models.

Some highlights of his later work:

- If a type can be omitted in a model of size \beth_{ω_1} , then it can be omitted in arbitrarily large models. This was the first use of the Erdös–Rado partition theorem to construct indiscernibles.
- If a countable theory has fewer that 2^{\aleph_0} non-isomorphic countable models, then it has at most \aleph_1 . This result exploited the topological structure of the space of countable models and foreshadowed work in descriptive set theory on equivalence relations.
- Morley characterized when a complete decidable theory has a decidable saturated model, one of the first uses of a priority argument in a model theoretic setting.
- Morley and Keisler studied end extensions of countable models of set theory–the foundational work on nonstandard models of set theory.

In addition to his trailblazing mathematical work, Morley was known for his generosity, kindness and an infectious sense of humor.

NEW BOOKS (Also see http://www.aslonline.org.)

- The Cabal Seminar, vols. I-IV. Editors: Alexander S. Kechris, Benedikt Löwe, & John R. Steel (Cambridge University Press, 2020, ISBN 978-1-108-92022-3). The proceedings of the Los Angeles Caltech-UCLA "Cabal Seminar" were originally published in the 1970's and 1980's. This series of four books collects the seminal papers from those proceedings, together with extensive unpublished material, new papers on related topics, and discussion of research developments since the publication of the original volumes. Volume I focuses on the subjects of "Games and Scales" and "Suslin Cardinals, Partition Properties, and Homogeneity," Volume II on "Wadge Degrees and Pointclasses" and "Projective Ordinals," Volume III on "HOD and its Local Versions" and "Recursion Theory," and Volume IV on "Extensions of AD, models with choice," along with material important to the Cabal that does not fit neatly into one of its main themes. The four-volume set is now available as part of the ASL's *Lecture Notes in Logic* series, and is offered at a 25% discount to ASL members. For details, see https://www.cambridge.org/us/academic/subjects/mathematics/logic-categories-and-sets/cabal-seminar-volumes-iiv?format=WX&isbn=9781108920223.
- Oeuvres Choisies de Marc Krasner. Editors: Luc Bélair and Bruno Poizat (L'Harmattan, 2019, ISBN 978-2-343-16573-8), 546 pages. Marc Krasner (1912-1985) was a French mathematician, who is mostly known for his pioneering work in ultrametric analysis, valued fields, and the *p*-adic numbers. But he also did original work pertaining to mathematical logic with his general Galois theory and his foundational definitionism. The papers are all reproduced from the original published papers (all in French), and presented with short introductory notes by the editors, with contributions by Gilles Christol and Paulo Ribenboim. The book also contains two exceptional documents: excerpts of two letters from Krasner to his friend Paulo Ribenboim, where he essentially tells the story of his (mostly mathematical) life, from his childhood in Ukraine to his life in France from the late 1920s on (including his time in the French army in World War II). The book is available in electronic form at https://www.editions-harmattan.fr/index.asp?navig=catalogue&obj=livre&no=64040.

- Ph.D. Abstracts in the Bulletin of Symbolic Logic. The *Bulletin of Symbolic Logic* now publishes abstracts of recent Ph.D. theses in logic. Christian Rosendal is the editor for this section of the *BSL*. For further information, or to inform the editor of a newly completed dissertation, visit http://aslonline.org/journals/the-bulletin-of-symbolic-logic/logic-thesis-abstracts-in-the-bulletin-of-symbolic-logic/.
- 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://aslonline.org/membership/world-bank-list-as-of-october-2020-for-2021-memberships/ includes Brazil, Bulgaria, Colombia, India, 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://aslonline.org/membership/ individual-membership/. After the initial two-year period new members under this program will pay the reduced membership dues, US\$18 for 2021, as long as their country of residence is on the ASL's list of developing economies.
- Reduced Dues for Individuals and Institutions in Developing Economies. The ASL offers reduced dues for individuals and institutions in developing economies. For 2021, the reduced dues are US\$18 for individuals and US\$130 for institutional basic membership, US\$180 for institutional 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://aslonline.org/membership/individual-membership/ or contact the ASL Business Office: ASL, Dept. of Mathematics, Univ. 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.
- Emeritus and Retired ASL Individual Membership. The ASL offers retired individual members two membership options. Emeritus membership includes all the privileges of regular individual membership and is available to retired individuals who have been members of the ASL for 15 years. The dues for Emeritus membership for 2021 are US\$51. The privileges attached to Retired membership include the ASL newsletter and the right to vote in ASL elections, but do not include subscriptions to the ASL journals. Retired membership is offered to retired individuals who have been members of the Association for 20 years and is free. For more information about both options, visit http://aslonline.org/membership/.

The next newsletter will be mailed in January 2021. Items to be included should reach the Secretary-Treasurers before January 15, 2021.

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