Association for Symbolic Logic

BUSINESS OFFICE: BOX 742, VASSAR COLLEGE 124 RAYMOND AVENUE, POUGHKEEPSIE, NEW YORK 12604, USA FAX: 1-845-437-7830; EMAIL: asl@vassar.edu WEB: http://www.aslonline.org

ASL NEWSLETTER

September 2011

• In Memoriam: Horacio Arló-Costa. Horacio Arló-Costa, professor of philosophy at Carnegie Mellon University, died unexpectedly in New York City on July 14, 2011, at age 54. A renowned logician and philosopher, Arló-Costa's innovative research crossed many different fields, including formal epistemology, artificial intelligence, behavioral decision research, and cognitive neuroscience.

Arló-Costa received his Ph.D. in philosophy from Columbia University in 1997 and joined Carnegie Mellon's Philosophy Department as a post-doctoral fellow the same year. Over the past fifteen years, he rose to the rank of professor and recently helped to found Carnegie Mellon's Center for Formal Epistemology (CFE) with Kevin T. Kelly. Additionally, Arló-Costa served as editor for *The Review of Symbolic Logic*, as area editor in epistemology for *Synthese*, and as member of the editorial board for the *Journal of Philosophical Logic*.

Arló-Costa's work focused on different branches of philosophical logic, formal epistemology, decision theory, and behavioral decision theory. His main line of research centered on probabilistic models for conditionals and non-monotonic notions of consequence, epistemic logic, first-order modal logic, and belief revision. More recently, Arló-Costa's focus shifted boldly from the realm of ideal rationality to the more realistic world of bounded rationality and fast and frugal heuristics for decision making, which resulted in a number of theoretical articles and behavioral studies.

Arló-Costa's greatest influence may have been on the many students he taught, mentored, and with whom he collaborated. The Center for Formal Epistemology will host a commemorative colloquium in his honor on November 18-19, 2011; see http://www.andrew.cmu.edu/org/cfe/cfe-page.html.

• In Memoriam: Herbert Enderton. Herbert Enderton died at his home in Santa Monica, California on October 22, 2010, after battling leukemia for nearly a year. Enderton, who was born in 1936, received his Ph.D. in mathematics in 1962 at Harvard University under the supervision of Hilary Putnam. He had a postdoctoral appointment at MIT from 1962 to 1964, and he was an Assistant Professor at UC Berkeley from 1964 to 1968.

In 1968 he came to UCLA, where he took on two half-time positions, one in the UCLA Mathematics Department and the other as an editor of the Reviews Section of *The Journal of Symbolic Logic*. He continued as an editor of the Reviews until 2002. In 2003 he retired from the Mathematics Department, but taught regularly until he became ill in 2009. He also continued running the UCLA Logic Colloquium, as he had for decades.

Enderton's thesis and the majority of his published research was on recursion theoretic hierarchies. This subject, which Enderton characterized as "little steps for little feet," was a very active part of mathematical logic in the 1950s, 1960s, and 1970s, and Enderton was an important contributor to it. In the early 1970s, he began devoting himself to teaching, writing expository articles, and—with great success—writing textbooks.

Enderton's first book, A Mathematical Introduction to Logic, was published in 1972. It is the most popular logic text at the advanced undergraduate/beginning graduate level, and it is often used—especially by computer scientists—as "the" standard reference to logic. Now in its second edition published in 2011, it is still going strong. Spanish and Chinese translations appeared in 2004 and 2006, respectively. His 1977 Elements of Set Theory also has been very successful. A new undergraduate text, Computability Theory: an Introduction to Recursion Theory, was completed after he became ill and was published in 2011.

Alonzo Church had brought himself and the Reviews Section of *The Journal* to UCLA a year before Enderton arrived and joined him. Church retired as Reviews Editor at the end of 1979. After a two-year period of sharing the job with William Craig, Enderton took charge of the Reviews Section. Beginning in 1976 it was decided that only books were reviewed, as the ASL no longer could afford to review every publication in logic and Church opposed selective reviewing of articles. Reviewing of articles began anew in 1981, increasing the size and scope

of Enderton's job.

Enderton's passing is a real loss to his colleagues at UCLA, to the ASL, and to logic in general. He is survived by his wife Catherine, his sons Eric and Herbert ("Bert"), and his granddaughter Evelyn.

• The 2011 ASL Election. At the end of this year the ASL will elect two members of the Executive Committee of the Council and two members of the Council. All terms are for three years beginning January 1, 2012. The ballot will be sent to all ASL members with the November Newsletter. The 2011 Nominating Committee has nominated Martin Grohe (Humboldt University of Berlin) and Michael Rathjen (Leeds) for the Executive Committee positions, and Deirdre Haskell (McMaster) and Rosalie Iemhoff (Utrecht) for the Council positions. The Nominating Committee consisted of Toshiyasu Arai, Michael Benedikt, Carlos DiPrisco, Mirna Džamonja, David Marker, Yiannis Moschovakis (Chair), and Richard Zach.

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@vassar.edu or ASL, Box 742, Vassar College, 124 Raymond Ave., Poughkeepsie, N.Y. 12604, USA) no later than November 1, 2011. In a contested election, each candidate has the opportunity to make a 100-word statement to be distributed with the ballot.

• 2011 Sacks Prize. The ASL invites nominations for the 2011 Sacks Prize for the most outstanding doctoral dissertation in mathematical logic. Nominations must be received by September 30, 2011. 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 2011 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, 2010, and September 30, 2011, 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 where the doctorate was awarded, letter of recommendation from the adviser, and an electronic copy of the thesis in .pdf form, or the address of a web site from which an electronic copy in .pdf form can be downloaded. An independent second letter of recommendation is strongly encouraged. Nominations should be sent to the Committee Chair, Itay Neeman; .pdf files sent as attachments by email to ineeman@math.ucla.edu are preferred. The form of such letters and other pertinent details can be found at the web site above, and need to be read prior to submitting a nomination. Correspondence should be addressed to Itay Neeman, Department of Mathematics, University of California Los Angeles, Los Angeles, CA 90095-1555, USA.

Those wishing to contribute to the Sacks Prize Fund may send contributions to the ASL office (ASL, Box 742, Vassar College, 124 Raymond Avenue, Poughkeepsie, New York 12604). All such contributions are tax-deductible within the USA.

• Call for Proposals: 2014 North American Annual Meeting. The ASL Committee on Logic in North America requests proposals for the 2014 ASL North American Annual meeting, to be held some time in the first five months of 2014. 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 in the pattern: west (Berkeley 2011), midwest (Madison 2012), east (Waterloo 2013). Thus, for 2014 the committee seeks a location in the west. Any reasonable proposal, however, will be considered. For more information, interested parties should contact the Committee Chair, Matt Valeriote (email: matt@math.mcmaster.ca) no later than January 9, 2012.

- Call for Proposals: 2013 AMS-ASL Joint Special Session. The ASL Committee on Logic in North America requests proposals for an AMS-ASL Joint Special Session to be held at the Joint Mathematics Meetings in San Diego, January 9–12, 2013. Proposals or requests for further information should be sent to the Committee Chair, Matt Valeriote (email: matt@math.mcmaster.ca). The deadline for receipt of proposals is January 9, 2012.
- Discounted Dues for New ASL Individual Members. The ASL now 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.

ASL MEETINGS

• Student Travel Awards: The 2012 ASL North American Annual Meeting, 2012 ASL European Summer 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 2012 ASL North American Annual Meeting in Madison, Wisconsin, or the 2012 ASL European Summer Meeting in Manchester, England; see below for information about these meetings. Student members of the ASL also 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 on a US flag carrier. Application by email is encouraged; put "ASL travel application" in the subject line of your message.

For the 2012 ASL North American Annual Meeting, applications and recommendations should be received before the deadline of December 19, 2011, by the Program Chair: Bradd Hart, Dept. of Mathematics & Statistics, McMaster University, 1280 Main Street West, Hamilton, Ontario, Canada L8S 4K1; Fax: 905-522-0935; email: hartb@mcmaster.ca. Applications by email are preferred.

For the 2012 ASL European Summer Meeting, applications and recommendations should be received before the deadline of March 23, 2012, by the Organizing Committee: LC2012, c/o Alex Wilkie, School of Mathematics, The Alan Turing Building, University of Manchester, Manchester M13 9PL, UK; email: lc2012@manchester.ac.uk.

For ASL student member travel grants to ASL or ASL-sponsored meetings (other than the 2012 North American Annual Meeting and the 2012 European Summer Meeting), applications and recommendations should be received at least three months prior to the meeting at the ASL Business Office: ASL, Box 742, Vassar College, 124 Raymond Avenue, Poughkeepsie, New York 12604, USA; Fax: 1-845-437-7830; email: asl@vassar.edu. Decisions will be communicated at least two months prior to the meeting.

- 2011-12 ASL Winter Meeting (with APA). December 27–30, 2011, Washington, D.C. This meeting will be held jointly with the Annual Meeting of the Eastern Division of the American Philosophical Association. Two invited sessions are planned. The first, on Dynamical Semantics, includes the speakers N. Charlow, W. Starr, and S. Yalcin. In the second session, on Lambda calculi, type systems, and applications to natural language, the speakers are: C. Barker, O. Kiselyov, and C.-c. Shan. The members of the Program Committee are M. Glanzberg and P. Kremer (Chair). A registration form and hotel information is enclosed in this Newsletter mailing.
- 2011-12 ASL Winter Meeting (with Joint Mathematics Meetings). January 6–7, 2012, Boston, Massachusetts. This meeting will take place in conjunction with the Joint Mathematics Meetings. The invited speakers include: J. Baldwin, J. Franklin, C.W. Henson, J. Knight, R. Kossak, D. Sinapova, and W.H. Woodin. There also will be an AMS-ASL Special Session on *The Life and Legacy of Alan Turing*, organized by D. Dzha-

farov, J. Hirst, and C. Mummert. The members of the Program Committee are N. Dobrinen, P. Fejer, and P. Scowcroft (Chair). A registration form and hotel information is enclosed in this Newsletter mailing.

• 2012 ASL North American Annual Meeting. March 31–April 3, 2012, Madison, Wisconsin. The twentythird annual Gödel Lecture will be delivered by J. Steel. The invited speakers are: A. Dow, I. Goldbring, W. Goldfarb, J. Miller, A. Montalban, T. Pitassi, G. Sargsyan, S. Starchenko, and M. Vardi. The following special sessions are planned (with organizers in parentheses): Computability (J. Reimann), Model theory (M.C. Laskowski), Set theory (D. Raghaven and J. Steprans), Structural proof theory and computing (D. Miller), and the history of logic on the centenary of the birth of Jean van Heijenoort (T. Drucker). The members of the Program Committee are: J. Avigad, B. Hart (Chair) A. Miller, G. Nadathur, and J. Reimann. The Local Organizing Committee includes: U. Andrews, M. Cai, S. Lempp (Chair), A. Miller, and J. Miller.

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 December 5, 2011, at the ASL Business Office: ASL, Box 742, Vassar College, 124 Raymond Avenue, Poughkeepsie, New York 12604, USA; Fax: 1-845-437-7830; email: asl@vassar.edu.

 2012 ASL European Summer Meeting (Logic Colloquium '12). July 12-18, 2012, Manchester, England. The Program Committee members are: U. Abraham, L. Beklemishev, B. Cooper, P. D'Aquino (Chair), A. Dawar, G. Sundholm, M. Tressl, and F. Wolter. The Local Organizing Committee includes: S. Borovik, M. Kambites, J. Paris, M. Prest, M. Tressl, A. Vencovska, A. Wilkie (Chair), and G. Wilmers. For further information, visit http://www.mims.manchester.ac.uk/events/workshops/LC2012/index.php.

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—hard copy or email—should be received before the deadline of March 30, 2012 at the official meeting address: LC2012, c/o Alex Wilkie, School of Mathematics, The Alan Turing Building, University of Manchester, Manchester M13 9PL, UK; email: lc2012@manchester.ac.uk.

- 2013 ASL North American Annual Meeting. May 8-May 11, 2013, Waterloo, Ontario, Canada. The Local Organizing Committee includes: S. Ben-David, B. Csima (Chair), D. DeVidi, R. Moosa, and R. Willard.
- 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 submitting them. Revised abstracts that follow the rules will be considered if they are received by the announced deadline.

ASL SPONSORED MEETINGS

- History and Philosophy of Computing. November 7-10, 2011, Het Pand, Belgium. Topics on which this event will focus include: the birth, evolution and future of computation; philosophical, foundational and practical issues of computability in logic, mathematics and computer science; and, computation in the sciences. The invited speakers include: W. Aspray, M. Davis, F. Kamareddine, S. Krämer, G. Sambin, R. Turner and S. Wolfram. The Conference Chairs are L. De Mol and G. Primiero. For further information, visit http://www.computing-conference.ugent.be/.
- Twelfth Asian Logic Conference. December 15–20, 2011, Wellington, New Zealand. This meeting will be held jointly with a meeting of the Australasian Association for Logic (AAL). The tutorial speakers are M. Grohe and Z. Sela. The invited plenary speakers include: M. Detlefsen (joint with AAL), I. Goldbring, N. Greenberg, W. Guohua, H. Ono (joint with AAL), G. Sargsyan, and A. Tsuboi. Special sessions will be offered on the following topics (with organizers in parentheses): algorithmic randomness (A. Nies), logical aspects of algebraic structures (R. Downey), logical aspects of graphs and matroids (G. Whittle), modal logic (R. Goldblatt and

Newsletter continued on separate sheet

ASL SPONSORED MEETINGS (continued)

E. Mares), and set theory (Q. Feng and H. Woodin). There will be an additional workshop for students on December 14th featuring the conference tutorial speakers. The Program Committee includes: T. Arai, R. Downey, Q. Feng, S.S. Goncharov, B. Kim, G. Restall, and Y. Yue. The Local Organizing Committee members are: C. Bailey, R. Downey, N. Greenberg, and G. Whatarau. For further information, visit http://msor.victoria.ac.nz/Events/ALC2011/WebHome.

- Turing Centenary Conference; Computability in Europe 2012 (CiE 2012)—How the World Computes. June 18–23 2012, Cambridge, England. The eighth in a series organized within the network "Computability in Europe" (CiE), CiE 2012 is one of a series of special events, running throughout the Alan Turing Year, celebrating Turing's unique impact on mathematics, computing, computer science, informatics, morphogenesis, philosophy and the wider scientific world. Its central theme is the computability-theoretic concerns underlying the broad spectrum of Turing's interests, and the contemporary research areas founded upon and animated by them. Invited speakers include: D. Aharonov, V. Becher, L. Blum, R. Downey, Y. Gurevich, J. Hartmanis, A. Hodges, R. Jozsa, S. Kauffman, J. Murray, S. Shieber, P. Smolensky, I. Stewart, and L. Valiant. Special sessions are planned on the following topics (with chairs in parentheses): computational models after Turing: the Church-Turing Thesis and beyond (M. Davis and W. Sieg); cryptography, complexity, and randomness (R. Downey and J. Lutz); morphogenesis/emergence as a computability theoretic phenomenon (P. Mani and P. Sloot); open problems in the philosophy of information (P. Adriaans and B. Löwe); the Universal Turing Machine and the history of the computer (J. Copeland and J. Tucker); and, the Turing Test and thinking machines (M. Bishop and R. Verbrugge). The Program Committee Co-Chairs are S.B. Cooper and A. Dawar, and the Chair of the Local Organizing Committee is A. Dawar. For more information, visit http://www.cie2012.eu.
- Twenty-seventh Annual IEEE Symposium on Logic in Computer Science (LICS 2012). June 25-28, 2012, Dubrovnik, Croatia. The LICS Symposium is an annual international forum on theoretical and practical topics in computer science that relate to logic in a broad sense. The Program Chair is N. Dershowitz, the General Chair is R. Alur, and the Conference Co-Chairs are V. Lipovac and A. Scedrov. For further information, visit http://www2.informatik.hu-berlin.de/lics/lics12/.

CALENDAR OF OTHER MEETINGS (Also see http://www.aslonline.org.)

- Appalachian Set Theory. October 15, 2011, Chicago, Illinois. B. Velickovic will give a day-long workshop entitled, "Proper forcing remastered". This workshop series is supported by the National Science Foundation. For further information, visit http://www.math.cmu.edu/~eschimme/Appalachian/Index.html.
- Rutgers MAMLS Conference. October 22-23, 2011, New Brunswick, New Jersey. The fall 2011 MAMLS Meeting will be dedicated to the memory of Greg Hjorth. The invited speakers include: S. Gao, A. Kechris, I. Neeman, S. Popa, S. Shelah, J. Steel, A. Tornquist, and W.H. Woodin. For further information, visit http://www.math.rutgers.edu/~sthomas/RU2011.html.
- Model Theory of Difference Fields and Applications. December 5–9, 2011, Orsay, France. This workshop aims to promote interactions among model theorists, algebraic geometers, and number theorists on topics in difference fields, their model theory and its applications to Diophantine geometry and algebraic dynamics. Minicourses are planned on the following topics: Introduction to the needed basic notions of model theory, Basic algebraic properties of difference fields and the model theory of algebraically closed fields with an automorphism (ACFA), The Zilber trichotomy principle in ACFA and its applications to Diophantine geometry, The Rössler-Pink theory of abelian varieties as difference varieties, and an Introduction to algebraic dynamics and the applications of the model theory of ACFA to algebraic dynamics. In addition there will be a short series of talks on the main results in Hrushovski's paper, *The Elementary Theory of the Frobenius Automorphisms* and its applications. Invited speakers include: J.B. Bost, A. Chambert-Loir, Z. Chatzidakis, M. Hils, Y. Laszlo, D. Rössler, Newsletter continued on reverse side

and T. Scanlon. The organizers are F. Benoist and E. Bouscaren. Prior knowledge of model theory is not assumed, and introductions to the areas of application will also be provided. Graduate students working in any of the areas concerned are welcome; a limited number of grants for living expenses will be available. For more information, visit http://www.math.u-psud.fr/~bouscare/workshop_diff/index.html#english.

- Mid-Atlantic Mathematical Logic Seminar (MAMLS). January 13-15, 2012, Deerfield Beach, Florida. This event, hosted by Florida Atlantic University, is part of Alan Turing Year, commemorating the centenary of his birth (see http://www.mathcomp.leeds.ac.uk/turing2012/). There will be a special session dedicated to Turing's life and times, which will include an address by his biographer David Leavitt, as well as other surprises. The invited speakers for the scientific portion of the meeting include: W. Calvert, M. Davis, D. Dzhafarov, J. Hamkins, P. Hofstra, R. Miller, A. Nerode, G. Sacks, A. Scedrov, W. Sieg, and R. Soare. For further information, including information about funding for participants, write to R. Lubarsky (email: Lubarsky.Robert@comcast. net) or visit http://math.fau.edu/richman/FAU2012.html.
- North American Summer School in Logic, Language, and Information (NASSLLI 2012). June 18–22, 2012, Austin, Texas. This event, loosely modeled on the long-running ESSLLI series in Europe (see http://www.esslli2012.pl), will consist of courses and workshops with a focus on interdisciplinary work involving logic, linguistics, computer science, cognitive science, philosophy, and artificial intelligence. The Program Committee Co-chairs are C. Areces and V. de Paiva. The Steering Committee includes: D. Beaver, P. Kolaitis, L. Moss, V. de Paiva, S. Shieber, and M. Vardi. For more information, visit http://nasslli2012.com/.
- Twenty-fourth European Summer School in Logic, Language and Information (ESSLLI-2012). August 6–17, 2012, Opole, Poland. The European Summer Schools in Logic, Language and Information focus on the interface between linguistics, logic and computation. Foundational, introductory and advanced courses, together with workshops, cover a wide variety of topics within the three areas of interest: Language and Computation, Language and Logic, and Logic and Computation. The Chair of the Program Committee is A. Herzig and the Local Co-chair is A. Pietryga. The Organizing Committee Co-Chairs are J. Czelakowski and U. Wybraniec-Skardowska. ESSLLI-2012 is organized under the auspices of the European Association for Logic, Language and Information (FoLLI). For more information about ESSLLI-2012 visit http://www.esslli2012.pl; for further information about FoLLI, visit http://www.folli.org.
- Advances in Modal Logic (AiML) 2012. August 22-25, 2012, Copenhagen, Denmark. This is the ninth conference in a series aimed at presenting an up-to-date picture of the state of the art in modal logic and its many applications. The Co-chairs of the Program Committee are S. Ghilardi and L. Moss. The Organizing Committee Co-chairs are T. Bolander and T. Brauner. The deadline for submission of full papers is March 16, 2012, and for abstracts for short presentations the deadline is June 1, 2012. For further information visit http://hylocore.ruc.dk/aiml2012.

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

- New Journal: Computability. This is the official journal of the Association Computability in Europe (CiE). Published by IOS Press, the first volume will be published in 2012. *Computability* is a peer reviewed journal devoted to publishing original research of highest quality centered around the topic of computability. The subject is understood from a multidisciplinary perspective, linking theoretical and real-world concerns from computer science, mathematics, biology, physics, computational neuroscience, history and the philosophy of computing. The Editor-in-Chief is V. Brattka. For more information, visit http://www.computability.de/journal/.
- Verification of Sequential and Concurrent Programs. Authors: K.R. Apt, F.S. de Boer, and E.-R. Olderog (third extended edition, with a forward by A. Pnueli; Springer, 2009, ISBN: 978-1-84882-744-8) http://www.springer.com/computer/theoretical+computer+science/ book/978-1-84882-744-8.

The next Newsletter will be sent in November 2011. Items to be included should reach the Secretary-Treasurer before October 31, 2011.

Submitted by Charles Steinhorn, Secretary-Treasurer.