University of Florida Special Year in Mathematical Logic September 2006-June 2007 http://www.math.ufl.edu/~jal/logicyear logicyear@clas.ufl.edu

Mathematical logic is entering a phase of increasingly intense conversation with other parts of mathematics. The events of the Special Year will be devoted to the exploration of various channels of communication between several fields of logic as well as the rest of the mathematical sciences.

Combinatorial Set Theory Workshop, Sep. 15-17, 2006

Organizers: András Hajnal, Jean Larson, Jindřich Zapletal Speakers include: M. Džamonja, P. Komjáth, J. Nešetřil, S. Todorčević

Computability and Complexity in Analysis, Oct. 25-29, 2006

Organizers: Douglas Cenzer, Denis Hirschfeldt, Klaus Weihrauch Speakers include: Rod Downey, Ker-I Ko, Anil Nerode

Model Theory and Computable Model Theory, Feb. 5-10, 2007

Organizers: Valentina Harizanov, David Marker, Carol Wood Tutorial speakers: Julia Knight, Anand Pillay, Thomas Scanlon

Singular Cardinals and Inner Model Theory, Mar. 5-11, 2007

Organizers: Matthew Foreman, William Mitchell, John Steel

Annual Meeting of ASL, Mar. 10-13, 2007

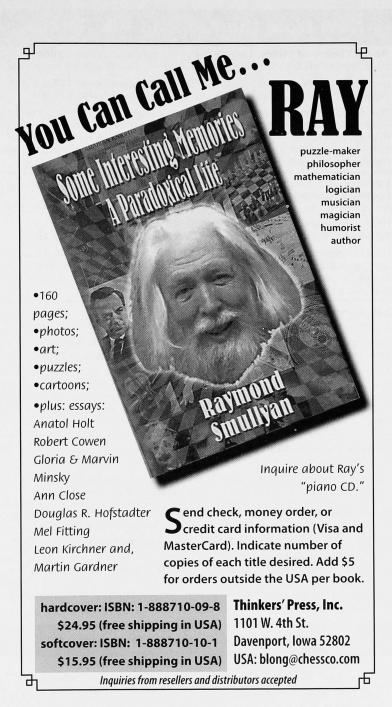
Set Theory of the Reals Workshop, May 5-11, 2007

Organizers: Alexander Kechris, Stevo Todorčević, Jindřich Zapletal Speakers include: Ilijas Farah, Justin Moore, Edward Odell

Various Special Lectures

Speakers include: M. Magidor, D. A. Martin, A. Nerode, G. Sacks, R. Soare

We invite applications for support for stays short and long. Special support is available for women, participants from the Southeast, and graduate students. The events of the Special Year and this advertisement are funded by NSF grant 0532644 as well as support from CLAS UF, RGP UF, and the Department of Mathematics, UF.



New from the ASL and A K Peters

Model Theory of Fields, Lecture Notes in Logic 5 Second Edition

Daye Marker, Marqit Messmer, Anand Pillay Published by the ASL

Hardcover; ISBN: 1-56881-281-7; \$59.00; **ASL members: \$47.20** Paperback: ISBN: 1-56881-282-5; \$26.00; **ASL members: \$20.80**

The model theory of fields is a fascinating subject stretching from Tarski's work on the decidability of the theories of the real and complex fields to Hrushovksi's recent proof of the Mordell-Lang conjecture for function fields. This volume provides an insightful introduction to this active area, concentrating on connections to stability theory.

Logicism Renewed, Lecture Notes in Logic 23

Logical Foundations for Mathematics and Computer Science
Paul C. Gilmore

Published by the ASL

Hardenvery ISBN 1 56991 275 2, #60 00; ASI members: #55 20

Hardcover; ISBN: 1-56881-275-2; \$69.00; **ASL members: \$55.20** Paperback; ISBN: 1-56881-276-0; \$39.00; **ASL members: \$31.20**

Using Intensional Type Theory (ITT) the author provides a unified foundation for mathematics and computer science, yielding a much simpler foundation for recursion theory and the semantics of computer programs than that currently provided by category theory.

Intensionality, Lecture Notes in Logic 22

Edited by Reinhard Kahle Published by the ASL

Hardcover; ISBN: 1-56881-267-1; \$50.00; **ASL members: \$40.00** Paperback; ISBN: 1-56881-268-X; \$35.00; **ASL members: \$28.00**

A compilation of articles about intensionality in philosophy, logic, linguistics, and mathematics. The articles approach the concept of Intensionality from different perspectives. This volume highlights the particular interdisciplinary nature of intensionality with articles spanning the areas of philosophy, linguistics, mathematics, and computer science.

Reverse Mathematics 2001, Lecture Notes in Logic 21

Edited by Stephen G. Simpson

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Fundamentals of Mathematical Logic

Peter G. Hinman

Published by A K Peters

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Based on the author's more than 35 years of teaching experience, this introductory graduate text develops students' intuition by presenting complex ideas in the simplest context for which they make sense. The book is appropriate for use as a classroom text, for self-study, and as a reference on the state of modern logic.

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Classical Mathematical Logic

The Semantic Foundations of Logic RICHARD L. EPSTEIN

With contributions by Lesław W. Szczerba

In Classical Mathematical Logic, Richard L. Epstein relates the systems of mathematical logic to their original motivations to formalize reasoning in mathematics. The book also shows how mathematical logic can be used to formalize particular systems of mathematics. It sets out the formalization not only of arithmetic, but also of group theory, field theory, and linear orderings. These lead to the formalization of the real numbers and Euclidean plane geometry. The scope and limitations of modern logic are made clear in these formalizations.

The book provides detailed explanations of all proofs and the insights behind the proofs, as well as detailed and nontrivial examples and problems. The book has more than 550 exercises. It can be used in advanced undergraduate or graduate courses and for self-study and reference.

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New from the ASL and A K Peters

Logic in Tehran

Proceedings of the Workshop and Conference on Logic, Algebra, and Arithmetic, held October 18-22, 2003, Lecture Notes in Logic 26 Edited by Ali Enayat, Iraj Kalantari, Mojtaba Moniri

Published by the ASL

Hardcover; ISBN: 1-56881-295-7; \$70.00; **ASL members: \$56.00** Paperback; ISBN: 1-56881-296-5; \$40.00; **ASL members: \$32.00**

This proceedings volume contains research papers in mathematical logic, especially in model theory and its applications to algebra and formal theories of arithmetic. Other papers address interpretability theory, computable analysis, modal logic, and the history of mathematical logic in Iran. The conference was held in Tehran, Iran, in October 2003, with the expressed purpose of bringing together researchers with connections to Iranian logicians and promoting further research in mathematical logic in Iran.

Nonstandard Methods and Applications in Mathematics

Lecture Notes in Logic 25 Published by the ASL

Edited by Nigel J. Cutland, Mauro Di Nasso, David A. Ross

Hardcover; ISBN: 1-56881-291-4; \$75.00; **ASL members: \$60.00** Paperback; ISBN: 1-56881-292-2; \$35.00; **ASL members: \$28.00**

Nonstandard analysis is one of the great achievements of modern applied mathematical logic. In addition to the important philosophical achievement of providing a sound mathematical basis for using infinitesimals in analysis, the methodology is now well established as a tool for both research and teaching, and has become a fruitful field of investigation in its own right. This book is a collection of peer-reviewed papers solicited from some of the participants of this conference with the aim of providing something more timely than a textbook, but less ephemeral than a conventional proceedings. It contains both survey papers and research articles with special consideration for one, "Nonstandard analysis at pre-university level: naive magnitude analysis" in which the author discusses his experience teaching calculus through an infinitesimal approach.

Gödel's Theorem: An Incomplete Guide to Its Use and Abuse
Torkel Franzén
Published by A K Peters
Hardcover; ISBN: 1-56881-238-8; \$24.95; ASL members: \$19.96

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Articles should be submitted to Akihiro Kanamori, Department of Mathematics, Boston University, Boston, MA 02215, USA (aki@math.bu.edu); Communications may be submitted to the Managing Editor Rod Downey, Department of Mathematics, Victoria University of Wellington, Box 600, Wellington, New Zealand (rod.downey@vuw.ac.nz); or to any of the other editors: Matthew Foreman, Department of Mathematics, University of California, Irvine, CA 92697, USA (mforeman@math.uci.edu); or Phokion Kolaitis, Department of Computer Science, University of California Santa Cruz, Santa Cruz, CA 95064, USA (kolaitis@cse.ucsc.edu); or Manuel Lerman, Department of Mathematics, University of Connecticut, Storrs, CT 06269, USA (mlerman@math.uconn.edu); or Penelope Maddy, Department of Logic and Philosophy of Science, University of California, Irvine, CA 92697, USA (pjmaddy@uci.edu); or Katrin Tent, Fakultät für Mathematik, Universität Bielefeld, Postfach 100131, D-33501 Bielefeld, Germany (ktent@math.uni-bielefeld.de). Submissions that are not readily categorized as either Articles or Communications should be sent to the managing editor.

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