

ASSOCIATION FOR SYMBOLIC LOGIC
2011-2012 WINTER MEETING

John B. Hynes Veterans Memorial Convention Center,
Boston Marriott Hotel, and Boston Sheraton Hotel
Boston, MA

January 6-7, 2012

Program Committee: Natasha Dobrinen, Peter Fejer, Philip Scowcroft (Chair).

All ASL meeting participants are urged to register. The URL for advanced registration for the JMM can be found at <https://www.jointmathematicsm meetings.org/meetreg?meetnum=2138>. The registration desk for JMM will be located at the 2nd Floor Corridor, opposite Hall C, Hynes.

The Joint Mathematics Meetings includes an AMS/ASL co-sponsored Special Session: **The Life and Legacy of Alan Turing**, on Wednesday, January 4 and Thursday, January 5, to be held in Room 207, Hynes. The schedule for this Special Session appears on page 4 of this program. An MAA/AMS Invited Paper Session that may be of interest to logicians is **The Philosophy of Mathematics**, organized by Thomas Drucker, Bonnie Gold, and Daniel Sloughter.

All talks in the ASL meeting will be held in Room 207, Hynes.

The ASL Reception will take place on Friday, January 6th, 2012, 6:30 - 8:30 pm in Independence East, 2nd floor of the Sheraton.

FRIDAY, JANUARY 6
Room 207, Hynes

Morning

- 9:00 – 9:50 Invited Lecture: **W. Hugh Woodin** (University of California at Berkeley),
The end of the inner model program: ultimate L or not ultimate L .
- 10:00 – 10:50 Invited Lecture: **Dima Sinapova** (University of California at Irvine),
Prikry type forcings and singular combinatorics.

FRIDAY, JANUARY 6

Room 207, Hynes

Afternoon

- 2:15 – 3:05 Invited Lecture: **Julia F. Knight** (University of Notre Dame), *Structures associated with real closed fields and real closed exponential fields.*
3:15 – 4:05 Invited Lecture: **Johanna N. Y. Franklin** (University of Connecticut), *Randomness and ergodic theory.*
4:15 – 6:15 Contributed Talks, Session I: *See below.*

Friday Evening

- 6:30 – 8:30 ASL Reception in Independence East, 2nd floor of the Sheraton.

SATURDAY, JANUARY 7

Room 207, Hynes

Morning

- 9:00 – 9:50 Invited Lecture: **John Baldwin** (University of Illinois at Chicago), *Set theory and infinitary model theory.*
10:00 – 10:50 Contributed Talks, Session II: *see page 3.*

Afternoon

- 2:15 – 3:05 Invited Lecture: **Roman Kossak** (CUNY Graduate Center), *Twenty questions.*
3:15 – 4:05 Invited Lecture: **C. Ward Henson** (University of Illinois at Urbana-Champaign), *Continuous first order logic and Gurarii's universal homogeneous separable Banach space.*
4:15 – 6:15 Contributed Talks, Session III: *see page 3.*

CONTRIBUTED TALKS - SESSION I

Friday, January 6

Room 207, Hynes

- 4:15 – 4:35 **Sean Cox**, *Martin's Maximum and tower forcing.*
4:40 – 5:00 **Russell Miller and Jennifer Chubb Reimann***, *Approximable functions and strong reducibilities.*
5:05 – 5:25 **François G. Dorais, Jeffrey Hirst***, and **Paul Shafer**, *Reverse mathematics and dichotomy.*
5:30 – 5:50 **Paul Shafer**, *Complexity in the degrees of unsolvability of mass problems.*
5:55 – 6:15 **Wesley Calvert***, **Jennifer Chubb Reimann**, and **Russell Miller**, *The distance function on a computable graph.*

CONTRIBUTED TALKS - SESSION II

Saturday, January 7

Room 207, Hynes

- 10:00 – 10:20 **Sarah Cotter*** and **Sergei Starchenko**, *Forking in VC-minimal theories.*
10:25 – 10:45 **Donald Brower**, *Indiscernible sequences and simplicity.*

CONTRIBUTED TALKS - SESSION III

Saturday, January 7

Room 207, Hynes

- 4:15 – 4:35 **Justin Brody**, *Superstable generic graphs with rich geometries.*
4:40 – 5:00 **François G. Dorais**, *Classical consequences of continuous choice principles from intuitionistic analysis.*
5:05 – 5:25 **Timothy H. McNicholl**, *Computing boundary extensions of conformal maps.*
5:30 – 5:50 **Katalin Bimbó*** and **J. Michael Dunn**, *The decision problem of T_{\rightarrow} .*
5:55 – 6:15 **Dan E. Willard**, *An umbrella formalism for examining self-justifying systems.*

AMS-ASL SPECIAL SESSION

The Life and Legacy of Alan Turing

Organizers: Damir Dzhafarov, Jeffry Hirst, and Carl Mummert

Room 207, Hynes

SESSION I

Wednesday, January 4

- 8:00 – 8:20 **Christopher P. Porter**, *Algorithmic randomness and pathological computable measures.*
- 8:30 – 8:50 **Stephen Flood**, *Computing the strength of some combinatorial theorems.*
- 9:00 – 9:20 **Rebecca M. Steiner**, *Low_n Boolean subalgebras.*
- 9:30 – 9:50 **Bonni J. Kealy*** and **David J. Wollkind**, *Vegetative Turing pattern formation: a historical perspective.*
- 10:00 – 10:40 **Stuart A. Kauffman**, *Answering Descartes: beyond Turing.*

SESSION II

Wednesday, January 4

- 2:15 – 2:55 **Martin D. Davis**, *A survey of Alan Turing's contributions to logic, to the invention of general purpose computers, and to Theoretical Computer Science.*
- 3:15 – 3:55 **Andrew P. Hodges**, *Alan Turing: the creative power of mathematics.*
- 4:15 – 4:55 **Marvin Minsky**, *The influence of Alan Turing.*
- 5:15 – 5:55 **James H. Moor**, *Alan Turing's philosophy of mind.*

SESSION III

Thursday, January 5

- 8:00 – 8:40 **Gerald E. Sacks**, *E-Recursion theory.*
- 9:00 – 9:20 **Julia F. Knight**, *The universal Turing machine, and Turing operators.*
- 9:30 – 9:50 **Lance Fortnow**, *Turing's Influence on computational complexity.*
- 10:00 – 10:20 **Joseph S. Miller**, *A small step beyond the Turing degrees.*
- 10:30 – 10:50 **Grigori Mints**, *Ordinal logics and proof theory.*
- 11:00 – 11:40 **Theodore A. Slaman**, *The mathematics of relative definability.*

SESSION IV

Thursday, January 5

- 1:00 – 1:40 **Craig Bauer**, *Alan Turing and voice encryption.*
- 2:00 – 2:20 **Kirsten Eisentraeger**, *Turing's work and Hilbert's Tenth Problem.*
- 2:30 – 2:50 **Peter W. Shor**, *Quantum money from knots.*
- 3:00 – 3:40 **Wilfried Sieg**, *Gödel's theorems, Turing's machines, and mathematical minds.*