

ASSOCIATION FOR SYMBOLIC LOGIC
2009-2010 WINTER MEETING

Moscone Center West
San Francisco, CA
January 15-16, 2010

Program committee: Michael Beeson, Bjoern Kjos-Hanssen, John Steel (Chair).

All ASL meeting participants are urged to register. The URL for advanced registration for the JMM can be found at www.ams.org/amsmtgs. The registration desk for JMM will be located in the Moscone Center West, first floor lobby, and open Tuesday 3-7pm, Wednesday-Friday 7:30am-4pm, and Saturday 7:30am-2pm.

The Joint Mathematics Meetings includes an AMS/ASL co-sponsored Special Session: **Surreal numbers**, on Wednesday, January 13, to be held in room 3011, third floor. The schedule for this Special Session appears on page 3 of this program. There will also be an AMS/ASL/MAA co-sponsored panel discussion on **Hilbert's Tenth Problem** on Thursday, January 14, 10am-12pm, in room 3003, third floor, Moscone Center West. The panelists are listed on page 3 of this program.

All talks in the ASL meeting will be held in Room 2004, second floor, Moscone Center West.

The ASL Reception will take place on Friday, January 15, 2010, 6:00 - 8:00 p.m. in Sierra C at the San Francisco Marriott.

FRIDAY, JANUARY 15

Room 2004, second floor, Moscone Center West

Morning

- 9:00 – 9:50 Invited Lecture: **Chris Miller** (Ohio State University), *Expansions of o-minimal structures by trajectories of definable vector fields.*
- 10:00 – 10:50 Invited Lecture: **Slawomir J. Solecki** (University of Illinois at Urbana-Champaign), *Ramsey theory for finite structures.*

Afternoon

- 2:00 – 2:50 Invited Lecture: **Joseph S. Miller** (University of Wisconsin, Madison), *Randomness and computational strength.*
- 3:00 – 3:50 Invited Lecture: **Fernando J. Ferreira** (Universidade de Lisboa), *Bar-recursive interpretations of classical analysis.*
- 4:10 – 5:45 Contributed Talks, Session I: *See page 2.*

Friday Evening

6:00 – 8:00 ASL Reception in Sierra C, San Francisco, Marriott.

SATURDAY, JANUARY 16

Room 2004, second floor, Moscone Center West

Morning

- 9:00 – 9:50 Invited Lecture: **John Harrison** (Intel Corporation), *Decidability and undecidability of real vector spaces.*
- 10:00 – 10:50 Invited Lecture: **Stevo Todorcevic** (University of Paris 7 and University of Toronto), *Tukey reducibility as a setup for classifying mathematical structures.*

Afternoon

- 2:00 – 2:50 Invited Lecture: **François Loeser** (École Normale Supérieure), *Model theory and non-Archimedean tame topology, with a view towards Berkovich spaces.*
- 3:10 – 5:20 Contributed Talks, Session II: *See below.*

CONTRIBUTED TALKS - SESSION I

Friday, January 15

Room 2004, second floor, Moscone Center West

- 4:10 – 4:30 **Nicholas Rupprecht**, *“Universal” Schnorr tests.*
- 4:35 – 4:55 **Nathaniel L. Ackerman, Cameron E. Freer, and Daniel M. Roy**, *The computability of conditional probability distributions.*
- 5:00 – 5:20 **Wesley Calvert**, *Probabilistic computation and stochastic processes.*
- 5:25 – 5:45 **Amy Turlington**, *Computable dimension of Heyting algebras.*

CONTRIBUTED TALKS - SESSION II

Saturday, January 16

Room 2004, second floor, Moscone Center West

- 3:10 – 3:30 **Grigori Mints**, *A simple epsilon substitution method for ID1.*
- 3:35 – 3:55 **Nate Ackerman**, *Trees, sheaves, and definition by recursion.*
- 4:00 – 4:20 **Billy Joe Lucas**, *A bimodal deontic evidential logic for the right to prove truths.*
- 4:35 – 4:55 **Lynn Scow**, *Characterizations of stable and NIP theories by generalized indiscernible sequences.*
- 5:00 – 5:20 **Demirhan Tunc**, *Expansion of Presburger Arithmetic with a predicate for $\lfloor \sqrt{2}x \rfloor$.*

AMS-ASL SPECIAL SESSION

Surreal Numbers

Organizers: Lou van den Dries and Philip Ehrlich

Room 3011, 3rd Floor, Moscone

Wednesday, January 13

- 8:00 – 8:40 **Philip Ehrlich**, *Surreal numbers, Conway names, and the simplicity hierarchy.*
- 9:00 – 9:40 **Ovidiu Costin**, *Surreal numbers and real analysis.*
- 10:00 – 10:40 **Lou van den Dries**, *Recent work on H -fields.*
- 2:15 – 2:55 **Joris van der Hoeven**, *Transseries, a survey.*
- 3:15 – 3:55 **Salma Kuhlmann*** and **Saharon Shelah**, *The exponential logarithmic power series fields.*
- 4:15 – 4:55 **Joris van der Hoeven**, **Salma Kuhlmann**, and **Mickaël Matusinski***, *Surreal numbers as transseries.*
- 5:15 – 6:05 **Julia Knight** and **Karen Lange***, *Generalized power series and real closed fields, Parts I and II.*

AMS-ASL-MAA Panel Discussion

Hilbert's Tenth Problem

Organizers: Jeremy Avigad, Penelope Maddy, and Charles Steinhorn

Room 3003, 3rd Floor, Moscone

Thursday, January 14, 10:00 a.m. - 12:00 p.m.

Panelists: **Martin Davis**, **Bjorn Poonen**, **Karl Rubin**,
and **Alexandra Shlapentokh**