

MoL 2015

The 14th Meeting on the Mathematics of Language

Proceedings

July 25–26, 2015
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Introduction

We are pleased to introduce the proceedings of the 14th Meeting on Mathematics of Language, MoL, to be held at the University of Chicago on July 25–26, 2015.

This volume contains eleven regular papers and two invited papers. The regular papers, which were selected by the Program Committee from a total of twenty-two submissions, feature a broad variety of work on mathematics of language, including phonology, formal language theory, natural language semantics, and language learning. The invited papers are presented by two distinguished researchers in the field: David McAllester, Professor and Chief Academic Officer at the Toyota Technological Institute at Chicago, and Ryo Yoshinaka, Assistant Professor at Kyoto University.

We would like to express our sincere gratitude to our colleagues on the Program Committee for the time and effort that they put into the reviewing of the papers, and to Min-Yen Kan for his help with the publishing of these proceedings in the ACL Anthology.

We wish you all a fruitful meeting.

Marco Kuhlmann, Makoto Kanazawa and Gregory M. Kobele (editors)

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Anssi Yli-Jyrä (University of Helsinki, Finland)

Invited Speakers:

David McAllester (Toyota Technological Institute at Chicago, USA)
Ryo Yoshinaka (Kyoto University, Japan)

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Program

Saturday, July 25

- 09:30–10:15 *A Refined Notion of Memory Usage for Minimalist Parsing*
Thomas Graf, Brigitta Fodor, James Monette, Gianpaul Rachiele, Aunika Warren
and Chong Zhang
- 10:15–11:00 *Abstract Categorical Parsing as Linear Logic Programming*
Philippe de Groot
- 11:00–11:15 Coffee Break**
- 11:15–12:00 *Topology of Language Classes*
Sean A. Fulop and David Kephart
- 12:00–14:00 Lunch Break**
- 14:00–14:20 S.-Y. Kuroda Prize Ceremony**
- 14:20–15:05 *Individuation Criteria, Dot-types and Copredication: A View from Modern Type Theories*
Sergios Chatzikyriakidis and Zhaohui Luo
- 15:05–15:50 *Lexical Semantics and Model Theory: Together at Last?*
András Kornai and Marcus Kracht
- 15:50–16:35 *A Frobenius Model of Information Structure in Categorical Compositional Distributional Semantics*
Dimitri Kartsaklis and Mehrnoosh Sadrzadeh
- 16:35–16:50 Coffee Break**
- 16:50–17:50 Invited Talk: *A Synopsis of Morphoid Type Theory*
David McAllester

Sunday, July 26

09:30–10:30 Invited Talk: *General Perspective on Distributionally Learnable Classes*
Ryo Yoshinaka

10:30–10:45 Coffee Break

10:45–11:30 *Canonical Context-Free Grammars and Strong Learning: Two Approaches*
Alexander Clark

11:30–12:15 *Output Strictly Local Functions*
Jane Chandlee, Rémi Eyraud and Jeffrey Heinz

12:15–13:00 *How to Choose Successful Losers in Error-Driven Phonotactic Learning*
Giorgio Magri and René Kager

13:00–15:00 Lunch Break

15:00–15:45 *A Concatenation Operation to Derive Autosegmental Graphs*
Adam Jardine and Jeffrey Heinz

15:45–16:30 *Syntactic Polygraphs. A Formalism Extending Both Constituency and Dependency*
Sylvain Kahane and Nicolas Mazziotta

16:30–17:30 Business Meeting