

Thursday

4:00 – 5:30 Tutorial: Bayesian Modeling

Kasia Hitczenko (University of Maryland) and *Laurel Perkins* (University of Maryland)

5:30 – 7:00 Tutorial: Vector Space Models

Allyson Ettinger (University of Maryland)

Friday

8:45 – 10:45 Syntax and Processing I

8:45 *Richard Futrell* (UC Irvine, Department of Language Science) and *Roger Levy* (MIT, Department of Brain & Cognitive Sciences). Do RNNs learn human-like abstract word order preferences?

9:15 *Soo Hyun Ryu* (Department of Linguistics, University at Buffalo) and *Rui Chaves* (Department of Linguistics, University at Buffalo). On the interaction between dependency frequency and thematic fit in sentence processing.

9:45 *Marten van Schijndel* (Johns Hopkins University) and *Tal Linzen* (Johns Hopkins University). Can entropy explain successor surprisal effects in reading?

10:15 *Jungo Kasai* (Paul G. Allen School of Computer Science & Engineering, University of Washington) and *Robert Frank* (Department of Linguistics, Yale University). Jabberwocky Parsing: Dependency Parsing with Lexical Noise.

10:45 – 11:45 Poster I

Weiwei Sun (Peking University). Empty Categories Help Parse the Overt.

Heather Burnett (LLF, CNRS-Université Paris Diderot) and *Olivier Bonami* (LLF, CNRS-Université Paris Diderot). A Conceptual Spaces Model of Socially Motivated Language Change.

Esther Seyffarth (Heinrich Heine University Dusseldorf). Identifying Participation of Individual Verbs or VerbNet Classes in the Causative Alternation

Li Lucy (Stanford University) and *Julia Mendelsohn* (Stanford University). Using sentiment induction to understand variation in gendered online communities.

Jane Chandlee (Haverford College), *Remi Eyraud* (Université Aix-Marseilles), *Jeffrey Heinz* (Stony Brook University), *Adam Jardine* (Rutgers University) and *Jonathan Rawski* (Stony Brook University). How the Structure of the Constraint Space Enables Learning.

Grzegorz Chrupala (Tilburg University), *Lieke Gelderloos* (Tilburg University), *Ákos Kádár* (Tilburg University) and *Afra Alishahi* (Tilburg University). On the difficulty of a distributional semantics of spoken language.

Marco Silvio Giuseppe Senaldi (Scuola Normale Superiore of Pisa), *Yuri Bizzoni* (University of Gothenburg) and *Alessandro Lenci* (University of Pisa). What do Neural Networks actually learn, when they learn to identify idioms?

Matthew Goldrick (Northwestern University), *Laurel Brehm* (Max Planck Institute for Psycholinguistics), *Pyeong Whan Cho* (University of Michigan) and *Paul Smolensky* (Johns Hopkins University & Microsoft Research). Transient blend states and discrete agreement-driven errors in sentence production

Timothee Mickus (Université Paris Diderot, Laboratoire de Linguistique Formelle), *Olivier Bonami* (Université Paris Diderot, Laboratoire de Linguistique Formelle) and *Denis Paperno* (Loria, CNRS). Distributional Effects of Gender Contrasts Across Categories.

Deniz Beser (University of Pennsylvania Department of Computer and Information Science) and *Spencer Caplan* (University of Pennsylvania Department of Linguistics). Local Processes of Homophone Acquisition.

Carolyn Anderson (University of Massachusetts, Amherst) and *Brian Dillon* (University of Massachusetts, Amherst). Guess Who's Coming (and Who's Going): Bringing Perspective to the Rational Speech Acts Framework.

Yang Xu (Department of Computer Science, San Diego State University), *Jeremy Cole* (College of Information Sciences and Technology, Pennsylvania State University) and *David Reitter* (College of

Information Sciences and Technology, Pennsylvania State University). Linguistic alignment is affected more by surprisal rather than social power.

Yilun Zhu (Georgetown University), Yang Liu (Georgetown University), Siyao Peng (Georgetown University), Austin Blodgett (Georgetown University), Yushi Zhao (Georgetown University) and Nathan Schneider (Georgetown University). Adpositional Supersenses for Mandarin Chinese.

Sheng-Fu Wang (New York University). The organization of sound inventories: A study on obstruent gaps. *Thomas Graf (Stony Brook University) and Nazila Shafiei (Stony Brook University)*. C-command dependencies as TSL string constraints.

Tiago Pimentel (Kunumi and Department of Computer Science, Universidade Federal de Minas Gerais), Brian Roark (Google) and Ryan Cotterell (Department of Computer Science, Johns Hopkins University). Rethinking Phonotactic Complexity.

Kasia Hitczenko (University of Maryland), Reiko Mazuka (RIKEN Center for Brain Science), Micha Elsner (The Ohio State University) and Naomi Feldman (University of Maryland). Normalization may be ineffective for phonetic category learning.

Zoey Liu (University of California, Davis). Quantifying Structural and Lexical Constraints in PP Ordering Typology

Ling Liu (University of Colorado Boulder), Mans Hulden (University of Colorado Boulder) and Rebecca Scarborough (University of Colorado Boulder). RNN Classification of English Vowels: Nasalized or Not *Libby Barak (Princeton University), Sammy Floyd (Princeton University) and Adele Goldberg (Princeton University)*. Modeling the Acquisition of Words with Multiple Meanings

11:45 – 2:00 Lunch

2:00 – 4:00 Invited Session: What Should Linguists Know about NLP/ML?

Samuel Bowman (NYU), Chris Dyer (Deep Mind and Carnegie Mellon), Allyson Ettinger (University of Maryland) and Noah Smith (University of Washington and Allen Institute for Artificial Intelligence)

4:00 – 6:00 Phonology I

4:00 *Coral Hughto (University of Massachusetts Amherst), Andrew Lamont (University of Massachusetts Amherst), Brandon Prickett (University of Massachusetts Amherst) and Gaja Jarosz (University of Massachusetts Amherst)*. Learning exceptionality and variation with lexically scaled MaxEnt.

4:30 *Caitlin Smith (University of Southern California) and Charlie O'Hara (University of Southern California)*. Formal Characterizations of True and False Sour Grapes.

5:00 *Elliott Moreton (University of North Carolina, Chapel Hill)*. Constraint breeding during on-line incremental learning.

5:30 *Mark Granroth-Wilding (University of Helsinki) and Hannu Toivonen (University of Helsinki)*. Unsupervised Learning of Cross-Lingual Symbol Embeddings Without Parallel Data.

6:00 – 7:00 Business Meeting

Saturday

8:45 – 10:45 Syntax and Processing II

8:45 *Kristina Gulordava (Pompeu Fabra University, Barcelona), Piotr Bojanowski (Facebook AI Research, Paris), Edouard Grave (Facebook AI Research, New York), Tal Linzen (Department of Cognitive Science, Johns Hopkins University) and Marco Baroni (Facebook AI Research, Paris)*. Colorless green recurrent networks dream hierarchically.

9:15 *Olga Zamaraeva (University of Washington), Kristen Howell (University of Washington) and Emily M. Bender (University of Washington)*. Modeling clausal complementation for a grammar engineering resource.

9:45 *Rebecca Marvin (Department of Computer Science, Johns Hopkins University) and Tal Linzen (Department of Computer Science, Johns Hopkins University)*. Targeted Syntactic Evaluation of Language Models.

10:15 *Yiding Hao (Yale University)*. Learnability and Overgeneration in Computational Syntax.

10:45 – 12:15 **Pragmatics and Discourse**

10:45 *Reuben Cohn-Gordon (Stanford University), Noah D. Goodman (Stanford University) and Christopher Potts (Stanford University)*. An Incremental Iterated Response Model of Pragmatics.

11:15 *Yang Liu (Georgetown University) and Amir Zeldes (Georgetown University)*. Discourse Relations and Signaling Information: Anchoring Discourse Signals in RST-DT.

11:45 *Dhivya Chinnappa (University of North Texas), Alexis Palmer (University of North Texas) and Eduardo Blanco (University of North Texas)*. Temporally-oriented possession: A corpus for tracking possession over time.

12:15 – 2:00 **Lunch**

2:00 – 3:00 **Invited talk: Hidden Structure and Ambiguity in Phonological Learning**

Gaja Jarosz (University of Massachusetts Amherst)

3:00 – 4:00 **Invited Talk: Computational Models of Hidden Structure Learning and Language Acquisition**

Mark Johnson (Macquarie University Department of Computing)

4:00 – 5:00 **Poster II**

Tamar Johnson (University of Edinburgh, Hebrew University in Jerusalem) and Inbal Arnon (Hebrew University in Jerusalem). Processing Non-Concatenative Morphology – A Developmental Computational Model.

Sedigheh Moradi (Stony Brook University), Alëna Aksënova (Stony Brook University) and Thomas Graf (Stony Brook University). The Computational Cost of Morphological Analyses.

Thomas McCoy (Department of Cognitive Science, Johns Hopkins University) and Tal Linzen (Department of Cognitive Science, Johns Hopkins University). Non-entailed subsequences as a challenge for natural language inference.

Michael White (The Ohio State University). Evaluation Order Effects in Dynamic Continuized CCG: From Negative Polarity Items to Balanced Punctuation.

Lucia Donatelli, Michael Regan, William Croft and Nathan Schneider. Tense and Aspect Semantics for Sentential AMR.

Claire Bonial (U.S. Army Research Lab), Lucia Donatelli (Georgetown University), Jessica Ervin (University of Rochester), and Clare Voss (U.S. Army Research Lab). Abstract Meaning Representation for Human-Robot Dialogue.

Youngah Do (University of Hong Kong) and Ka Yau Lai (University of Hong Kong). Measuring phonological distance in a tonal language: An experimental and computational study with Cantonese.

Lindy Comstock (UCLA), Michelle Tran (UCLA), Ariel Tankus (UCLA), Nader Pouratian (UCLA), Itzhak Fried (UCLA) and William Speier (UCLA). Developing a real-time translator from neural signals to text: An articulatory phonetics approach.

Dakotah Lambert (Earlham College, Richmond, Indiana, USA) and James Rogers (Earlham College, Richmond, Indiana, USA). A logical and computational methodology for exploring systems of phonotactic constraints.

Ezer Rasin (Leipzig University), Nur Lan (Tel Aviv University) and Roni Katzir (Tel Aviv University). Simultaneous learning of vowel harmony and segmentation.

Matthias Lalis (Johns Hopkins University) and Paul Smolensky (Johns Hopkins University, Microsoft Research AI). Augmenting Compositional Models for Knowledge Base Completion Using Gradient Representations.

Nazila Shafiei (Stony Brook University), Mai Ha Vu (University of Delaware) and Thomas Graf (Stony Brook University). Case assignment in TSL syntax: a case study.
Lindsay Hracs (University of Calgary). Quantifying the Relationship Between Child and Caregiver Speech Using Generalized Estimating Equations: The Case of 'Only.'
Sebastian Mielke (Department of Computer Science, Johns Hopkins University), Ryan Cotterell (Department of Computer Science, Johns Hopkins University), Jason Eisner (Department of Computer Science, Johns Hopkins University) and Brian Roark (Google). Are All Languages Equally Hard to Language-Model?
Charlie O'Hara (University of Southern California). Place and Position Are Computationally Different.
Mirac Suzgun (Harvard SEAS), Yonatan Belinkov (Harvard SEAS) and Stuart Shieber (Harvard SEAS). On Evaluating the Generalization of LSTM Models in Formal Languages.
Katharina Kann (NYU), Alex Warstadt (NYU), Adina Williams (NYU) and Samuel Bowman (NYU). Verb Argument Structure Alternations in Word and Sentence Embeddings.
Aleksei Nazarov (University of Toronto). Learning exceptionality indices for French variable schwa deletion.

Sunday

8:45 – 10:15 Phonology and Morphology

8:45 *Hossep Dolatian (Stony Brook University) and Jeffrey Heinz (Stony Brook University)*. RedTyp: A Database of Reduplication with Computational Models.
9:15 *Eric Rosen (Johns Hopkins University)*. Learning complex inflectional paradigms through blended gradient inputs.
9:45 *Colin Wilson (Johns Hopkins University)*. Re(current) reduplication: An interpretable network model of morphological copying.

10:15 – 12:15 Phonology II

10:15 *Gaja Jarosz (University of Massachusetts Amherst) and Aleksei Nazarov (University of Toronto)*. Evaluating Domain-General Learning of Parametric Stress Typology.
10:45 *Max Nelson (University of Massachusetts Amherst)*. Word Segmentation and UR Acquisition with UR Constraints.
11:15 *Kevin McMullin (University of Ottawa), Alëna Aksënova (Stony Brook University) and Aniello De Santo (Stony Brook University)*. Learning phonotactic restrictions on multiple tiers
11:45 *Nick Danis (Princeton University) and Adam Jardine (Rutgers University)*. Q-Theory Representations are logically equivalent to Autosegmental Representations