

CSTFRS 2019

**IWCS 2019 Workshop on Computing Semantics with
Types, Frames and Related Structures**

Proceedings of the Workshop

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Introduction

The Workshop on Computing Semantics with Types, Frames and Related Structures, colocated with the 13th International Conference on Computational Semantics (IWCS 2019), is intended as a forum for people interested in structured representations of linguistic information, especially from a computational perspective.

Structured representations play a central role in the study of natural language semantics, especially in cognitively oriented approaches in the tradition of Fillmore, Jackendoff, and Langacker. Formal semantics in the Montague-tradition, on the other hand, is less concerned with the structure of representations but with logical expressions, truth conditions, and model-theoretic interpretations. In recent years, however, there has been a growing body of research which aims to integrate structured entities into formal semantic accounts. Important developments in this field are the uses of rich type systems and frame-based representations in lexical and compositional semantics. A key feature of these approaches is that semantic representations can themselves be used to compute semantic content and have yielded a way of combining compositional and lexical semantics by providing a single representational system for different modalities.

The topics of this workshop cover both foundational issues (e.g. developments in rich type theoretical semantics) and applications of theories that employ structured representations to specific linguistic phenomena.

We would like to thank the organizers of IWCS 2019 for hosting our workshop in Gothenburg.

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Workshop Program

Friday, May 24, 2019

9:15–9:30 *Opening Remarks*

9:30–10:00 *Underspecification and interpretive parallelism in Dependent Type Semantics*
Yusuke Kubota, Koji Mineshima, Robert Levine and Daisuke Bekki

10:00–10:30 *Coffee*

10:30–11:00 *Translating a Fragment of Natural Deduction System for Natural Language into Modern Type Theory*
Ivo Pezlar

11:00–11:30 *Modeling the Induced Action Alternation and the Caused-Motion Construction with Tree Adjoining Grammar (TAG) and Semantic Frames*
Esther Seyffarth

11:30–12:00 *Complex event representation in a typed feature structure implementation of Role and Reference Grammar*
Erika Bellingham

12:00–13:30 *Lunch*

13:30–14:00 *Computational Syntax-Semantics Interface with Type-Theory of Acyclic Recursion for Underspecified Semantics*
Roussanka Loukanova

14:00–14:30 *Modeling language constructs with compatibility intervals*
Pavlo Kapustin and Michael Kapustin

14:30–15:00 *ImageTTR: Grounding Type Theory with Records in Image Classification for Visual Question Answering*
Arild Matsson, Simon Dobnik and Staffan Larsson

15:00–15:30 *Enthymematic Conditionals: Topoi as a guide for acceptability*
Eimear Maguire

15:30 *Coffee*

Friday, May 24, 2019 (continued)

15:30–16:00 *General discussion and closing*