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# Workshop on Semantic Spaces at the Intersection of NLP, Physics and Cognitive Science Programme

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9:00-9:25: Arrival and registration

9:25-9:30: Opening remarks

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• **9:30-10:30: Invited talk – Hans Briegel. Projective Simulation for Learning and Agency**

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10:30-11:00: *Coffee break*

**Session 1 of contributed talks: Physics**

- 11:00-11:25: William Zeng and Bob Coecke. *Quantum Algorithms for Compositional Natural Language Processing (this talk will start with a mini-tutorial on categorical compositional distributional semantics)*
- 11:25-11:50: Daniela Ashoush and Bob Coecke. *Dual Density Operators and Natural Language Meaning*
- 11:50-12:05 (Short talk): John van der Wetering. *Entailment Relations on Distributions*

12:05-13:45: *Lunch break*

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• **13:45-14:45: Invited talk – Dominic Widdows. Semantic Spaces: Successes and Goals**

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**Session 2 of contributed talks: NLP**

- 14:45-15:10. Dimitri Kartsaklis. *Coordination in Categorical Compositional Distributional Semantics*
- 15:10-15:35: Mehrnoosh Sadrzadeh. *Quantifier Scope in Categorical Compositional Distributional Semantics*
- 15:35-15:50 (Short talk): Stefano Gogioso. *A Corpus-based Toy Model for DisCoCat*

15:50-16:15: *Coffee break*

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• **16:15-17:15: Invited talk – Peter Gärdenfors. The Role of Domains in the Representation of Word Meanings**

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**Session 3 of contributed talks: Cognitive Science**

- 17:15-17:40: Josef Bolt, Bob Coecke, Fabrizio Genovese, Martha Lewis, Dan Marsden and Robin Piedeleu. *Interacting Conceptual Spaces*
- 17:40-17:55 (Short talk): Stephen McGregor, Matthew Purver and Geraint Wiggins. *Words, Concepts, and the Geometry of Analogy*

17:55-18:00: *Closing remarks*