

# 2nd Computational Cognition Workshop (COMCO 2021)

ZOOM // Gathertown

(zoom and Gather links will be sent out 1-2 days ahead of the workshop)

**All times are in CEST (Central European Summer Time)**

## Day 01, September 23, 2021

09:15-09:30 Welcome

09:30-10:30 **Invited talk: Agnieszka Wykowska**

*Title t.b.a.*

COFFEE BREAK (10 minutes)

10:40-11:10 **Talk 1:** Johannes Niediek, Maciej M Jankowski,  
Ana Polterovich, Alexander Kazakov and Israel Nelken  
*Understanding rat behavior in a naturalistic task via  
non-deterministic policies*

11:10-11:40 **Talk 2:** Jasmin L. Walter, Lucas Essmann, Sabine  
U. König and Peter König  
*Finding landmarks – an investigation of viewing behavior  
during spatial navigation in VR using a graph-theoretical  
analysis approach*

LUNCH BREAK (80 minutes)

13:00-14:00 **Invited talk: Claire Sergent**

*Title t.b.a.*

COFFEE BREAK (10 minutes)

14:10-14:40	<b>Talk 3:</b> Pau Vilimelis Aceituno <i>Emergent resonances in recurrent neural networks and their effects on learning</i>
14:40-15:10	<b>Talk 4:</b> Ham Huang and Adrianna Jenkins <i>Social Context Shapes Value Representation during Learning</i>
COFFEE BREAK + POSTER SESSION PREP (35 minutes)	
15:45-17:00	Poster session 1 (via Gather.Town)
<b>17:00-18:00</b>	<b>Invited talk: Richard Baraniuk</b>  <i>Title t.b.a.</i>

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## Day 02, September 24, 2021

<b>10:00-11:00</b>	<b>Invited Talk: Andrea Martin</b>  <i>Title t.b.a.</i>
COFFEE BREAK (10 minutes)	
11:10-12:25	Poster session 2 (via Gather.Town)
LUNCH BREAK (55 minutes)	
13:20-13:50	<b>Talk 5:</b> Samuel Jones and Gert Westermann <i>Under-resourced or overloaded? Rethinking working memory deficits in developmental language disorder</i>
13:50-14:20	<b>Talk 6:</b> Lucas Castillo, Pablo León-Villagrà, Nick Chater and Adam Sanborn <i>Human Random Generation as a Locally-Bound Process</i>
COFFEE BREAK (10 minutes)	
<b>14:30-15:30</b>	<b>Invited talk: Jacob Andreas</b>

*Title t.b.a.*

**15:30-16:00**

**Panel discussion with invited speakers and local Pls**

COFFEE BREAK + POSTER AWARD CEREMONY (25 minutes)

16:25-16:55

**Talk 7:** Sarah Fabi, Sebastian Otte and Martin V. Butz  
*Fostering Compositionality in Generative RNNs to Solve the  
Omniglot challenge*

SHORT BREAK (5 minutes)

**17:00-18:00**

**Invited talk: Tom Griffiths**

*Title t.b.a.*

18:00-18:15

Closing

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**POSTER SESSION 1 (23 September 2021, 15:45-17:00):**

**Howard Goldowsky**

*(La)Place Cells for Robot navigation*

**Nicolás A. Comay, Gabriel Della Bella, Mariano Sigman, Guillermo Solovey and Pablo Barttfeld**

*Implausible alternatives paradoxically increase confidence in a perceptual decision*

**Evie Malaia, Julia Krebs, Sean Borneman and Ronnie Wilbur**

*To understand is to predict: machine learning identifies low-frequency entrainment to visual stimuli as the basis of sign language comprehension via predictive processing*

**Simon Valentin, Neil R. Bramley and Christopher G. Lucas**

*Learning Hidden Causal Structure From Event Sequences*

**Xiangbin Teng**

*Prospective Temporal Locations Tracked by Neural Power Modulations and Captured by Recurrent Neural Networks*

**Paulina Friemann, Joschka Boedecker and Andrew D. Straw**

*A Framework to Infer Movement Planning from Observed Trajectories using Inverse Planning*

**Lorenzo Parenti, Abdulaziz Abubshait, Jairo Perez Osorio and Agnieszka Wykowksa**  
*Irrelevant robot social signals*

**Bora Çelebi, Alp Tuna, Ahmet Mete Karayaka, Filiz Tezcan and Funda Yıldırım**  
*Temporal Distortion Related Connectivity Mapping in Auditory Event Recognition*

**Tribhi Kathuria, X. Jessei Yang and Maani Ghaffari Jadidi**  
*Toward Learning-Aided Interactive and Inclusive Robot Museum docent*

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**POSTER SESSION 2 (24 September 2021, 11:10-12:25):**

**Lucas Bechberger**  
*Grounding Psychological Similarity Spaces in Deep Neural Networks*

**Jan Pöppel and Stefan Kopp**  
*Adaptive and Satisficing Cognition for Theory of Mind in Interaction*

**Rishit Das, Shagun Gupta, Nono Horiuchi and Asaad Al-Barwani**  
*Modelling the Behavior of Happiness Values*

**Eleonore Lumer and Hendrik Buschmeier**  
*Integrating Speaker-Hearer Relations into a Rational Speech Act-based Model of Politeness*

**Kah Kit Ng and Tomas Maul**  
*Do Artificial Neural Networks Need To Sleep?*

**Varad Srivastava and Minaxi Goel**  
*ToM (Theory of Mind)-ML: Machine Learning predicts Mentalization*

**Jinbiao Yang, Antal van den Bosch and Stefan Frank**  
*Unsupervised text segmentation predicts eye fixations during reading*

**Pablo Franco, Peter Bossaerts and Carsten Murawski**  
*The neural dynamics of complex problem-solving*

**Sidharth Ranjan, Rajakrishnan Rajkumar and Sumeet Agarwal**  
*Expectation Adaptation Models Hindi Preverbal Constituent Ordering*