# Social cognition in humans and robots - Conference program -

September 27<sup>th</sup>- 28<sup>th</sup>, 2018
University Medical Center Hamburg-Eppendorf
Erika-Haus (W29)
Hamburg, Germany





socSMCs.eu





eucognition.org

H2020

#### **Contents**

Time Schedule and Poster Presentations	
Invited Lectures: Abstracts	7
Contributed Talks: Abstracts	10
List of Participants	20
Practical Information	23

#### Venue

University Medical Center Hamburg-Eppendorf Erika-Haus (W29) Martinistr. 52, 20246 Hamburg

# Website

socSMCs.eu

#### **Email**

conference2018@socSMCs.eu

# **Conference organizers**

Andreas K. Engel (University Medical Center Hamburg-Eppendorf, Germany)

Peter König (University of Osnabrück, Germany)

Florian Göschl (University Medical Center Hamburg-Eppendorf, Germany)

Annika Lübbert (University Medical Center Hamburg-Eppendorf, Germany)

Alexander Maye (University Medical Center Hamburg-Eppendorf, Germany)

Mircea Stoica (University Medical Center Hamburg-Eppendorf, Germany)

# **Time Schedule**

# **Conference Program**

Thursday, Sept	Thursday, September 27, 2018		
8:00— 8:30	Registration, Coffee		
8:30— 9:00	Welcome and opening notes from the organizers		
9:00—10:00	Invited lecture: <b>lain Couzin</b> (Konstanz, Germany) "Collective sensing and decision-making in animal groups: From fish schools to primate societies"		
10:00—10:20	Contributed talk: <b>Liam Cross</b> (Buckingham, UK) "Walk it out: Actual and mentally simulated coordinated walking's effects on implicit and explicit attitudes"		
10:20—10:40	Contributed talk: <b>Basil Wahn</b> (Osnabrück, Germany / Vancouver, Canada) "Collective benefits in dyadic and triadic visual search: The role of receiving information about the actions of co-actors"		
10:40—11:00	Coffee break		
11:00—12:00	Invited lecture: <b>Scott Kelso</b> (Boca Raton, FL, USA) "In search of the laws that bind us"		
12:00—12:20	Contributed talk: <b>Sebastian Lammers</b> (Cologne / Jülich, Germany) "Understanding "what" or "how" - mirroring or mentalizing other person's actions"		
12:20—12:40	Contributed talk: <b>Atesh Koul</b> (Torino / Genoa, Italy) "Action observation areas represent intentions from subtle kinematic features"		
12:40—13:00	Contributed talk: <b>Artur Czeszumski</b> (Osnabrück, Germany) "Does the social situation affect how we process feedback about our actions?"		
13:00—14:00	Lunch (& poster session)		
14:00—15:00	Invited lecture: <b>Natalie Sebanz</b> (Budapest, Hungary) "How t(w)o act together: Coordination mechanisms in human joint action"		
15:00—16:00	Invited workshop: <b>Asaf Bachrach</b> (Paris, France) "Sensing sensorimotor contingencies – A dance improvisation workshop"		
16:00—16:30	Coffee break		
16:30—17:30	Invited lecture: <b>Paul F.M.J. Verschure</b> (Barcelona, Spain) "The Distributed Adaptive Control of social cognition and action in humans and androids"		
17:30—17:50	Contributed talk: <b>Mathis Jording</b> (Cologne, Germany) "The experience of interactivity during triadic gaze encounters in autism"		
17:50—18:10	Contributed talk: <b>Christian Guckelsberger</b> (London, UK) "Guiding social interaction dynamics with coupled empowerment maximisation"		
19:00	Social dinner at MS Cap San Diego (en.wikipedia.org/wiki/Cap_San_Diego)		







Friday, September 28, 2018

Friday, September 28, 2018	
8:30 - 9:00	Coffee
9:00 - 10:00	Poster session
10:00 - 11:00	Invited lecture: <b>Antonia Hamilton</b> (London, UK) "Neurocognitive mechanisms of human social interaction"
11:00 - 11:30	Coffee break
11:30 - 11:50	Contributed talk: <b>Elena Sibirtseva</b> (Stockholm, Sweden) "Temporal dependencies in multimodal human-robot interaction"
11:50 - 12:10	Contributed talk: <b>Ouriel Grynszpan</b> (Paris, France) "The sense of agency in haptic co-manipulation with a human versus a robot"
12:10 - 12:30	Contributed talk: <b>Cesco Willemse</b> (Genova, Italy) "Basic mechanisms of social cognition unravelled with the use of humanoid robots"
12:30 - 12:50	Contributed talk: <b>Judith Bütepage</b> (Stockholm, Sweden), <b>Ali Ghadirzadeh</b> (Stockholm, Sweden) "Generative sensorimotor models for human-robot interaction"
13:00 - 14:00	Lunch (& poster session)
14:00 - 14:20	Contributed talk: <b>Elpida Tzafestas</b> (Athens, Greece / Munich, Germany) "From proto-imitation to proto-association"
14:20 - 14:40	Contributed talk: <b>Maria Blancas</b> (Barcelona, Spain) "Measuring collaboration in a predictive game task: a comparison between autistic and neurotypical individuals using the Point of Social Subjective Equality"
14:40 - 15:00	Contributed talk: <b>Anna Ciaunica</b> (Porto, Portugal / London, UK) "The multisensory base of bodily coupling in face-to-face social interactions: Contrasting the case of autism with the mobius syndrome"
15:00 - 15:20	Contributed talk: <b>Alexandra Georgescu</b> (London, UK / Cologne, Germany) "Evaluating interpersonal synchrony in naturalistic dyadic conversations using motion energy analysis: Lessons from autism spectrum conditions and typical development"
15:30 - 16:30	Invited lecture: <b>Luciano Fadiga</b> (Genoa, Italy) "Interaction and communication"
16:30 - 17:00	Concluding remarks and farewell coffee







#### **Poster Presentation**

#### Poster session:

Friday, September 28th 2018 09:00 – 10:00 h

Posters will be presented on Friday. Posters can be hung up already on Thursday. Presenting authors are highlighted in bold (in alphabetical order).

### Albers, Friederike (Osnabrück, Germany)

"Enhancing priming effects with the embodied cognition approach on free-viewing behavior on news web pages"

#### Aly, Amir (Kusatsu, Japan)

"Towards understanding language through perception in situated human-robot interaction: from words grounding to grammar induction"

#### Araneda Hinrichs, Nicolás (Concepción, Chile)

"New materialism on social cognition"

#### **Arbonville, Jeremy** (Paris, France)

"Multimodal study of the identification and production of facial expression and the impact of personality traits in normal aging"

#### Barone, Pamela (Palma, Spain)

"The minimal Turing test: reciprocal contingencies for interaction detection"

#### Blancas-Munos, Maria (Barcelona, Spain)

"Measuring collaboration in a predictive game task: a comparison between autistic and neurotypical individuals using the Point of Social Subjective Equality"

#### Broz, Frank (Edinburgh, UK)

"Robot-assisted social skills training for ASD in the workplace"

#### Ching Low, Sock (Barcelona, Spain)

"Focusing attention on the mechanisms of autism"

#### Czeszumski, Artur (Osnabrück, Germany)

"Hyperscanning: a valid method to study neural underpinnings of social interaction"

#### Falk, Patrick (London, UK)

"Dyadic social interaction – high-resolution multimodal data capture & analysis"

#### Freire, Ismael (Barcelona, Spain)

"Modeling the formation of social conventions in multi-agent populations"

#### **Grynszpan, Ouriel** (Paris, France)

"Investigating learning cued by social versus non-social agents"

#### Houbre, Quentin (Tampere, Finland)

"Exogenous auditory attention with dynamic neural fields"

#### Hwang, Tonghun (Hannover, Germany)

"Leader follower relationship in a joint task"

#### Korn, Christoph (Hamburg, Germany)

"Learning about other persons' personality traits relies on combining reinforcement learning with representations of trait distributions and similarities"

#### **Lancia, Leonardo** (Paris, France)

"Manipulating verbal interaction via artificial agents to study inter-speaker coordination"

#### **Lübbert, Annika** (Hamburg, Germany)

"Relating first and third person observations of coordination and togetherness in social interaction"

# Nezami, Farbod N. and Wächter, Maximilian (Osnabrück, Germany)

"Project Westdrive: would you trust a robot to drive your car? – a highly realistic VR eye tracking experiment"

#### Nijssen, Sari (Nijmegen, The Netherlands)

"The influence of agency on motor resonance with robotic actions in 4- and 8-year olds"

# Richter, René (Chemnitz, Germany)

"Strengthening priority differentiation through an affective feedback signal from the amygdala"

# Rocca, Matilde (Turin, Italy)

"Wired actions: How the representation of others' upcoming movements shapes our kinematics"

#### Scheunemann, Marcus (Hatfield, UK)

"How intrinsic motivation can affect perceived agency and sustains the social interaction between humans and robots"

# **Schuberth, Susanne** (Osnabrück, Germany)

"Investigating neural correlates of inter-subject movement synchronization using EEG hyperscanning"

#### **Soriano, Marco** (Turin, Italy)

"The role of movement kinematics in neural chain selection during action observation"

#### **Strachan, James** (Budapest, Hungary)

"To Be Fair... Investigating the drive towards fairness in task distribution"

#### **Sutherland, Alexander** (Hamburg, Germany)

"Modulating dialogue transitions through learned verbal emotions"

#### Tanevska, Ana (Genoa, Italy)

"Are adults sufficiently emotionally expressive to engage in adaptive interaction with an affective robot?"

#### Thellman, Sam (Linköping, Sweden)

"The socio-cognitive function of mental state attribution to robots"

#### Trendafilov, Dari (Hatfield, UK)

Poster 1:"Information parsimony in collaborative interaction",

Poster 2:" Interpersonal sensorimotor contingencies: information-theoretic relevance of subjective experience"

#### Wahn, Basil (Vancouver, Canada)

"Performing a task jointly modulates audiovisual integration in timing and motion judgements"

#### Ye, Tian (London, UK)

"How motion cues influence visual perspective choice in multi-agent scenario"

# **Zhou, Yuefang** (Potsdam, Germany)

"How human-robot touch interaction affects human physiology and impressions of the robot"