



# Embodied A.I. – Exbodied Mind

## GESTURE – PERCEPTION – ROBOTICS

### International Workshop

4-5 July 2019

German Research School for Simulation Sciences, Schinkelstr. 2a / Room: GRS001 (1095I001)

This interdisciplinary workshop aims at exploring the phenomenon of embodiment in robotics as well as the embodiment of cognitive acts by focusing on the following three domains: GESTURE – PERCEPTION – ROBOTICS. GESTURE pertains to the analysis and computational modelling of manual gestures, head movements and facial mimics performed by human and non-human agents. PERCEPTION as such needs to be revisited in times when robots are supposed to “read” their interlocutors’ multimodally expressed intentions and react appropriately. And ROBOTICS inquires how recent developments in AI and machine learning have changed the notion of embodiment in robotics per se and more generally in the cognitive and technical sciences. The goal of this transdisciplinary workshop is to bring together scholars from different disciplines to analyze and conceptualize the mechanisms and semantics of embodied movement in the era of machine learning and AI.

#### Thursday, 4th July 2019, 15.00

Welcome and Introduction	<b>Gabriele Gramelsberger/Irene Mittelberg</b> (Aachen)	15.00-15.30
The Rise of AI-driven Robot Bodies and the Reconfiguration of Interaction	<b>Jaana Parvianien</b> (Helsinki)	15.30-16.30
Social Interaction as Situated Problem Solving	<b>Leon de Bruin</b> (Nijmegen/Amsterdam)	17.00-18.00
Augmented Gestures: Visualization and Pattern Analysis through Motion-Capture Technology	<b>Irene Mittelberg</b> (Aachen)	18.00-19.00

#### Friday, 5th July 2019, 9.00

From F2F Encounters to Gesture-Enhanced AI-Sociality	<b>Alexander Gerner</b> (Lissabon)	9.00-10.00
Approaches in Robotic Storytelling	<b>Philipp Wicke</b> (Dublin)	10.30-11.30
Human Kinaesthetics for Robots	<b>Dawid Kasprowicz</b> (Aachen)	11.30-12.30
Lunch and Final Discussion		12.30-14.00