

EMERGING

ACTIVITY

RELATING THINGS | Conference | 16./17.02.2017

Interdisciplinary Laboratory *Image Knowledge Gestaltung*, Humboldt-Universität zu Berlin, Sophienstr. 22a
 Registration open until 31st of January > julia.weitzel.1@hu-berlin.de

For centuries, **self-motion** attracted curiosity. While modernity attributed self-motion primarily to living beings, depriving **non-organic matter** of activity, today biological movement inspires development of new robotic technologies that **mimic self-movement in nature**. At the same time, activity in matter as such has been discovered by **new feminist materialism** as a research field in its own right, that challenges the modern **dualism of active and passive** that divide nature and genders. With this newly arisen interest in self-motion, debates once related to biological movement alone, reemerge and enter new fields in the sciences and humanities trying to tackle the phenomenon of self-motion.

The dichotomy between **holistic and reductionist models**, or **top down and bottom up** models using the terminology suggested by the historian of science Raphael Falk (2000), to explain movement in nature, is as old as the scientific study of organic movement itself. Current advances in the sciences and humanities demand a **re-examination of this dichotomy**. Increasingly powerful computer-based analyses of expanding data sets today enable us to produce more complex and dynamic descriptions of phenomena. The behaviors of **complex systems** on numerous levels, from composite materials through central nervous systems, to agglomerations of humans and the multiple potentialities

of relations, become computable, thus 'explicable' from a reductionist perspective. On the other hand, **statistical uncertainty** and **chaos theory** became accepted doctrines in science with repercussions in humanities, fostering interest in complexity and emergence. The dichotomy between holistic models and reductionist ones to explain movement in nature currently disintegrates – but what comes instead? What is **the potential of heuristics that contend the capacity for movement as intrinsic to any object?** Are descriptions justified according to which movement is rather an issue of more or less complex relations between things? And are there **ways to integrate a top down and bottom up perspective?**

As the different ways to approach activity and self-motion are of equal importance to diverse disciplines in the sciences and humanities struggling with the conflict of a search for complexity while being in need of practical models, this **interdisciplinary conference** discusses the emergence of movement in **historically grounded** and interdisciplinary perspective. The conference aims to spotlight advantages of either perspective and challenges the mutual exclusivity of a reductionist versus holist approach. Focal points of interest in this context are ascriptions of activity and passivity concerning **material, social, and symbolic** levels.

Program, February 16

- 10:00 Registration, Welcome Address & Coffee
- 10:30 Keynote **Myra Hird** (Queen's National Scholar School of Environmental Studies)
Microontologies of Waste, and the Radical Asymmetry of a Stratified Planet
- chair: **Bettina Bock von Wülfingen** (HU Berlin/Image Knowledge Gestaltung)
- 11:30 Short Coffee Break
- PANEL 1**
chair: **Thomas Stach** (HU Berlin/Image Knowledge Gestaltung)
- 11.50 **Matthias Staudacher** (HU Berlin/Image Knowledge Gestaltung)
From the Whole to the Part: The Search for the Theory of Everything
- 12.20 **Sebastian Schwesinger** (HU Berlin/Image Knowledge Gestaltung)
Travelling Information & Local Oscillation. Understanding Acoustics as Material-Symbolic Operations
- 12.50 Joint discussion
- 13:00 Lunch
- PANEL 2**
chair: **Martina Erlemann** (FU Berlin/Faculty of Physics)
- 14.00 **Luciana Parisi** (Goldsmiths University London)
From Automata of Movement to Automata of Thought: Or the Becoming Dynamic of Machines
- 14.30 **Christina Vagt** (HU Berlin/Image Knowledge Gestaltung)
Media History/s of Self-Motion
- 15.00 Joint discussion
- 15:20 Coffee Break
- PANEL 3**
chair: **John Dunlop** (MPI Golm/Image Knowledge Gestaltung)
- 15.40 **Lorenzo Giuducci** (MPI Golm/Image Knowledge Gestaltung)
From simple to complex: Plants' Strategies and bioinspired Solutions to build mechanically actuating Materials
- 16.10 **Claudia Müller-Birn** (HU Berlin/Image Knowledge Gestaltung)
Realizing human-machine-collaboration by mixed-initiative-interaction
- 16.40 Joint discussion
- 17.00 Coffee Break
- 17.20 Keynote **Ruth Hagenruber** (Universität Paderborn)
Emilie du Châtelet: Models of Relations and Activity between Leibniz and Newton
- chair: **Bettina Bock von Wülfingen** (HU Berlin/Image Knowledge Gestaltung)
- 18.20 Light Supper and Wine

Program, February 17

- 10.00 Coffee
- 10.30 Keynote **Luis Rocha** (Indiana University)
Material Turing Machines: The Active and Passive Modes of Information in Life and Collective Intelligence
- chair: **Thomas Stach** (HU Berlin/Image Knowledge Gestaltung)
- 11.30 Short Coffee Break
- PANEL 4**
chair: **Kerstin Palm** (HU Berlin/Image Knowledge Gestaltung)
- 11.50 **Janina Wellmann** (Leuphana Universität Lüneburg)
Biological Motion. An Emerging Field of Research
- 12.20 **Regina Hengge** (HU Berlin/Image Knowledge Gestaltung)
Folding into Ridges, Rings & Wrinkles – Building the Cities of Microbes
- 12.50 Joint discussion
- 13:00 Lunch
- PANEL 5**
chair: **Susanne Jany** (HU Berlin/Image Knowledge Gestaltung)
- 14.00 **Michaela Eder** (MPI Golm Berlin/Image Knowledge Gestaltung)
The Role of Hierarchy in Moving Biological Materials
- 14.30 **Jane Calvert** (High School Yards Edinburgh)
Organism Engineering: From Parts to Wholes
- 15.00 Joint discussion
- 15:20 Coffee Break
- PANEL 6**
chair: **Martin Kallmeyer** (HU Berlin/Image Knowledge Gestaltung)
- 15.40 **Iris van der Tuin** (Universiteit Utrecht)
On what May Emerge from Quantum Relatings: A Feminist new Materialist Contribution
- 16.10 **Khashayar Razghandi** (MPI Golm & HU Berlin/Image Knowledge Gestaltung)
Making Sense of Things, or Why your Stance Matters
- 16.40 Joint discussion
- 17.00 Light Supper and Wine

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> julia.weitzel.1@hu-berlin.de

For any further questions please contact the organizers
PD Dr. Bettina Bock von Wülfingen (HU Berlin/Image Knowledge Gestaltung/Project Rhizom)
> bettina.bock.v.wuelfingen@hu-berlin.de

or PD Dr. Thomas Stach (HU Berlin/Image Knowledge Gestaltung/Project Self-Moving Materials)
> tstach@zoosyst-berlin.de