

Detailed information available at

drive artefacts like prostheses or machinery. bodily grounds, or how neural signals can be used to in understanding others, how decision making is based on robots can be engineered, what role the motor system plays body and mind. We will discuss, for example, how humanoid theoreical, and simulate science involved with exploring The IK 2007 will aim at bridging between the empirical,

to inter-agent communication.

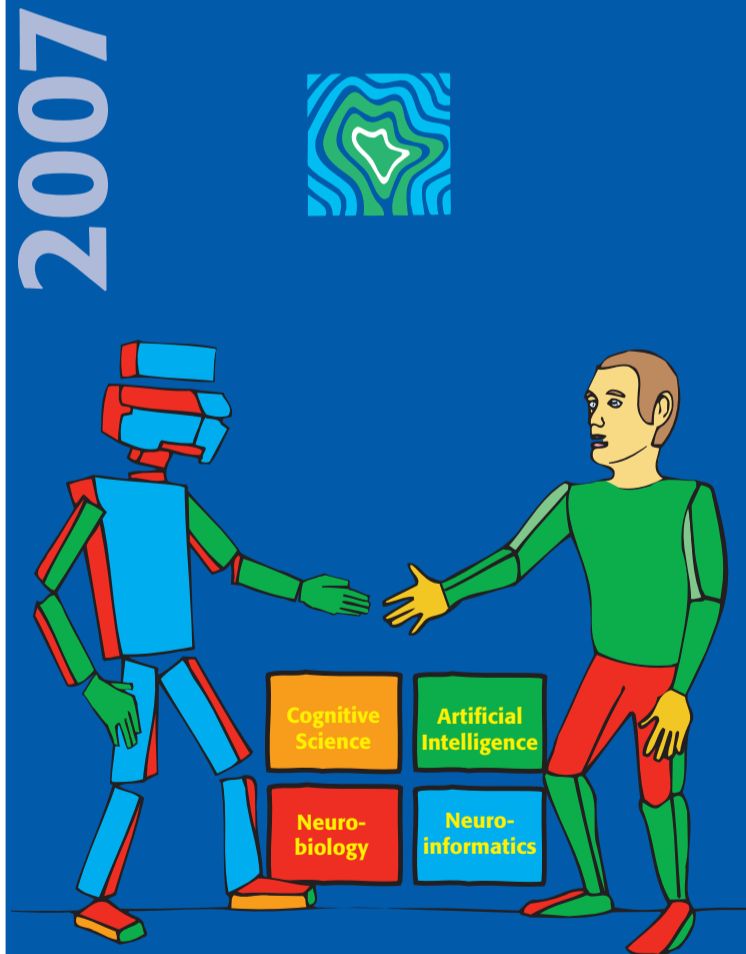
behavior, from goal-directed movements to problem-solving caption, cognition, and action in order to generate intelligent actively involved in the processing loops that interconnect per the body and the environment, including others agents, instead, action and body performance are not distinct realms. Instead, and psychology, in this view of "embodied minds", mental conclusions from artificial intelligence, robotics, neuroscience, evolving as a consequence of today's converging results and behavior can emerge in biological or artificial systems. It is aspect of our contemporary understanding of how intelligent move and slide into places. This example demonstrates one while actively exploiting the environment such that the parts continuously compute a myriad of feedback adjustments instead be to equip the agent with eyes and arms, and to local environments. The solution of embodied thought would intelligent brains are parts of complex bodies situated in their tion of abstract thought and is not found in nature, where ways, and match them with one another. This is the sole- is to memorise all parts, mentally rotate them in all possible would an intelligent agent solve a jigsaw puzzle? One solution The focus theme of this IK will be "Embodied Minds". How

ming conference site at the Lake Möhne.

are made in long evening and night sessions in the welco- special atmosphere: minds meet, music is played, and friends social event: in the evenings participants may enjoy the very discussions of focus topics. Additionally, the IK is a unique ductions to the four main fields of the IK, as well as in-depth from all over the world. Courses include up-to-date intro- Participants come mainly from European countries, lecturers dialogue and connectedness between the various disciplines. nities, science and technology, the IK endeavours to intensify researchers from academia and industry. By combining huma- and philosophy, it is aimed at students, postgraduates and cognitive science/psychology, artificial intelligence, robotics the-art course program in neurobiology, neural computation, spring school, which offers a dense, intensive and state-of- The interdisciplinary College (IK) is an annual one-week

Heinrich-Lübke-Haus, Günne at Lake Möhne
March 9-16
Focus Theme: Embodied Minds

Interdisciplinary College 2007



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Günne at Lake Möhnesee



Focus Theme Embodied Minds
www.ik2007.de

2007

- ◆ Olaf Blanke (Swiss Federal Institute of Technology, Lausanne)
- ◆ Norbert Boeddeker (RSBS, Canberra)
- ◆ Peter Brugger (University of Zurich)
- ◆ Josef Call (MPI for Evolutionary Anthropology Leipzig)
- ◆ Thomas Christaller (Fraunhofer IAIS, Sankt Augustin)
- ◆ Holk Cruse (University of Bielefeld)
- ◆ Leonardo Fogassi (University of Parma)
- ◆ Karl Grammer (Ludwig Boltzmann Institute, Wien)
- ◆ Barbara Hammer (Technical University Clausthal)
- ◆ Joachim Hertzberg (University of Osnabrück)
- ◆ Klaus-Peter Hoffmann (IBMT, St. Ingbert)
- ◆ Bernd Hommel (University of Leiden)
- ◆ Nils Kercher (MIR, Bonn)
- ◆ Nicole Krämer (University of Cologne)
- ◆ Hod Lipson (Cornell University, Ithaca)
- ◆ Rainer Malaka (University of Bremen)
- ◆ Hanspeter Mallot (University of Tübingen)
- ◆ Thomas Metzinger (J.-Gutenberg University, Mainz)
- ◆ Sriani Narayanan (UC Berkeley)
- ◆ Catherine Pelachaud (University of Paris)
- ◆ Robert Porzel (University of Bremen)
- ◆ Gregor Schöner (Ruhr-University Bochum)
- ◆ Magtie Shiffar (Rutgers University)
- ◆ Manfred Spitzer (University of Ulm)
- ◆ Gerhard Strube (University of Freiburg)
- ◆ Oskar v. Stryk (Technical University Darmstadt)
- ◆ Dawn Taylor (Case Western Res. Univ., Cleveland)
- ◆ Michael Theilscher (University of Dresden)
- ◆ Ipke Wachsmuth (University of Bielefeld)

Speaker

- ◆ Jan Malte Wiener (Lab. Physiologie de la perception et de l'action, Paris)
- ◆ Ipke Wachsmuth (University of Bielefeld)
- ◆ Gerhard Strube (University of Freiburg)
- ◆ Manfred Spitzer (Dept. of Psychiatry III, University of Ulm)
- ◆ Robert Porzel (University of Bremen)
- ◆ Hanspeter Mallot (University of Tübingen)
- ◆ Rainer Malaka (University of Bremen)
- ◆ Berenike Loos (European Media Laboratory, Heidelberg)
- ◆ Nicole Krämer (University of Cologne)
- ◆ Stefan Kopp (University of Bielefeld, Chair)
- ◆ Thomas Kammer (University of Ulm)
- ◆ Herbert Jaeger (International University Bremen)
- ◆ Christoph Hölischer (University of Freiburg)
- ◆ Thomas Christaller (Fraunhofer-IAIS, Sankt Augustin)
- ◆ Ansgar Büschges (University of Cologne, Chair)
- ◆ Marcus Bünkel (University of Cologne)

Organisation

- ◆ Peter Weiss-Blanckenhorn (FZ Jülich)
- ◆ Rolf A. Zwaan (Florida State University)

Conference Management

- ◆ Christine Harms (ccha, Sankt Augustin)
- ◆ Ansgret Weise (ZNL, University of Ulm)

Basic Courses

- ◆ BC1 Artificial Intelligence (Michael Theilscher, University of Dresden)
- ◆ BC2 Neurobiology (Manfred Spitzer, University of Ulm)
- ◆ BC3 Cognitive Science (Gerhard Strube, University of Freiburg)
- ◆ BC4 Neuroinformatics (Barbara Hammer, Technical University Clausthal)

Method Courses

- ◆ MC1 Modelling Animal Behavior (Holk Cruse, University of Bielefeld)
- ◆ MC2 Engineering Humanoid Robots (O. Von Stryk, University of Darmstadt)
- ◆ MC3 Brain Mapping and Functional Imaging (Peter Weiss-Blanckenhorn, FZ Jülich)
- ◆ MC4 Machine Learning (Gregor Schöner, Ruhr-University Bochum)

Special Courses: Embodied Perception

- ◆ SC1 Mirror Systems (Leonardo Fogassi, University of Parma)
- ◆ SC2 Active Sensing (Norbert Boeddeker, RSBS, Canberra)
- ◆ SC3 Cognitive Neurology of Embodiment (Peter Brugger, University of Zurich)
- ◆ SC4 The Embodied Visual System (Magtie Shiffar, Rutgers University)

Special Courses: Embodied Cognition

- ◆ SC5 Action Selection (Bernad Hommel, University of Leiden)
- ◆ SC6 Situation Models (Rolf A. Zwaan, Florida State University)
- ◆ SC7 Spatial Cognition (Hanspeter Mallot, University of Tübingen)
- ◆ SC8 Embodying AI – GOfAI Goes Robotics (Joachim Hertzberg, University of Osnabrück)

Special Courses: Embodied Communication

- ◆ SC9 Embodied Conversational Agents (Catherine Pelachaud, University of Paris)
- ◆ SC10 Situatedness and Grounding (Sriani Narayanan, UC Berkeley)

- ◆ SC11 Non-verbal Communication (K. Grammer, Lud. Boltz. Inst., Wien) & Nicole Krämer (Univ. of Cologne)
- ◆ SC12 Contextual Computing (R. Malaka & R. Porzel, University of Bremen)

Special Courses: Body and Mind in Theory, Action and Development

- ◆ SC13 Evolving Robots (Hod Lipson, Cornell University, Ithaca)
- ◆ SC14 Cortical Robot Control (Dawn Taylor, Case Western Res. Univ., Cleveland)
- ◆ SC15 Body and Mind in Philosophy (Thomas Metzinger, J.-Gutenberg University, Mainz)
- ◆ SC16 Prosthetics (Klaus-Peter Hoffmann, IBMT, St. Ingbert)

Special Event Courses:

- ◆ SC17 Aikido. A Japanese Martial Art As Embodied Meditation (Thomas Christaller, Fraunhofer-IAIS, St. Augustin)
- ◆ SC18 African Drumming (Nils Kercher, Bonn)

Registration

Registration is open until **February 15th, 2007** at <http://www.ik2007.de>. Early Bird registration by **January 14th, 2007**. Registration will be treated on a first come-first serve basis. Your registration will only be effective after you have received written confirmation and invoice.

Supporting Institutions

Gesellschaft für Informatik e.V. (GI)
Gesellschaft für Kognitionswissenschaft e.V. (GK)
Fraunhofer IAIS
Fritz Thyssen Stiftung

Fees

Members of supporting institutions:
normal fees 500 € (Early bird: 400 EUR)
phd-students** 300 € (Early bird: 240 EUR)
students* 100 € (Early bird: 80 EUR)

Non-Members:
normal fees 1.000 € (Early bird: 800 EUR)
phd-students** 400 € (Early bird: 320 EUR)
students* 150 € (Early bird: 120 EUR)

* proof of student state has to be included with application, only students not older than 27 will receive student reduction

**phd-students with part-time contracts.

Course materials are included in the conference fee.

Accommodation

Accommodation is not included in the conference fee. Usually, participants will take accommodation in the "Heinrich-Lübke-Haus" for the duration of the Interdisciplinary

College. The following fees are charged (accommodation/full-board, incl. Tuesday Buffet Dinner):

single room	490 €
double room	390 € (p. P.)
triple room	260 € (p. P.)

For participants taking external accommodation, a fee of **200 €** is charged for coffee breaks, meals, and the conference dinner.

Payment

Please total the amounts for your registration fee and your accommodation (in the applicable categories), add a flat fee of **6 € (for international money transfer only)**, and transfer in one amount:

Account holder:	Gesellschaft für Informatik e.V.
Account number:	10 637
Banque:	Sparkasse KölnBonn
Banque ZIP code:	370 501 98
Banque SWIFT code:	COLSDE 33
Int.BankAcc.No.:	DE68 3705 0198 0000 010637
Payment Purpose:	IK2007 & Participant name

Money transfer must be completed for regular registration by February 23rd and for Early bird by January 21st. Delays will result in additional fee of 50 €.

Cancellation

If cancellation is received in writing before **February 14th, 2007**, you will be refunded minus 30 € handling fee. For cancellations received after that date, no refunds will be made.

Poster Session

We encourage each participant of IK2007 to present their latest research projects with a poster. The poster session will be organised by:

Berenike Loos (European Media Laboratory, Heidelberg)
Jan Malte Wiener (Laboratoire de Physiologie de la perception et de l'action, Paris)

Poster abstracts will be accepted only electronically (ASCII, MS Word, PostScript or PDF-format). Please submit an abstract (max. 300 words) before **February 1, 2007**, including address and e-mail of the presenting author to: jan.wiener@college-de-france.de. The subject of the e-mail should start with "[IK2007]: Poster Session".

Student Stipends

Participants lacking financial support may apply for a scholarship to support their board & lodging. Applications must be made by filling in the web form at <http://www.ik2007.de/ik07/stipends> and must be submitted by **December 31, 2006**.