

## Final program for the Epigenetic Robotics Workshop, Edinburgh, August 2002

### Day 1 (Saturday, August 10)

08:15 – 08:45	Christopher G. Prince-- <i>Introduction</i>
08:45 - 09:00	Hideki Kozima-- <i>Sponsor Acknowledgement</i>
09:00 – 10:00	INVITED TALK: Luc Steels-- <i>Evolving External Representations</i>
10:00 – 10:30	Coffee
<b><i>Theoretical and Conceptual Issues I</i></b> <i>Session chair: Chris Prince</i>	
10:30 – 11:00	Razvan V. Florian-- <i>Why it is important to build robots capable of doing science</i>
11:00 – 11:30	Carlos Gershenson-- <i>Behaviour-based knowledge systems: An epigenetic path from behaviour to knowledge</i>
<b><i>Complex Skills I</i></b> <i>Session chair: Chris Prince</i>	
11:30 – 12:00	Giorgio Metta and Paul Fitzpatrick-- <i>Better vision through manipulation</i>
12:00 – 13:30	Poster presentations: <ul style="list-style-type: none"><li>• Uller: <i>When 9-month olds go “wow” and “yuk”:</i> <i>understanding other people’s desires</i></li><li>• Uller: <i>What’s the young infant representation of number like?</i></li><li>• Wolf and Nordin: <i>Walking humanoids for robotics research</i></li><li>• Itakura et al: <i>Sense of Self in Baby Chimpanzees</i></li><li>• Yamamoto and Kuniyoshi: <i>Global Dynamics: A new concept for design of dynamical behavior</i></li><li>• Kozima, Nakagawa, and Yano: <i>Emergence of imitation mediated by objects</i></li><li>• Yoshikawa, Kawanishi, Asada and Hosoda: <i>Body scheme acquisition by cross map learning among tactile, image and proprioceptive spaces</i></li><li>• Buller: <i>Volitron: On a Psychodynamic Robot and Its Four Realities</i></li><li>• Choi: <i>Humanoid Motion Description Language</i></li><li>• Hershberg: <i>Proposing a new focus for the study of natural and artificial cognitive systems</i></li><li>• Dickerson: <i>Looking like a human - how conversation analytic work on gaze direction in human interaction can be relevant for design and analysis of robotic interaction</i></li><li>• Warnett: <i>Unsupervised navigation using an economy principle</i></li></ul> <p><b><i>Buffet Lunch</i></b></p>
<b><i>Developmental Architectures</i></b> <i>Session Chair: Christian Balkenius</i>	
13:30 – 14:00	Andrea Kulakov and Georgi Stojanov-- <i>Structures, inner values, hierarchies and stages: Essentials for developmental robot architectures</i>

14:00 – 14:30	Ulrich Nehmzow-- <i>Physically embedded GA learning in multi-robot scenarios: The PEGA algorithm</i>
14:30 – 15:00	Akitoshi Ogawa and Takashi Omori-- <i>Looking for a suitable strategy for each problem - Multiple tasks approach to navigation learning task</i>
<b><i>Sensory-Motor Integration and Imitation I</i></b> <i>Session Chair: Yiannis Demiris</i>	
15:00 – 15:30	Pierre Andry, Philippe Gaussier and Jacqueline Nadel-- <i>From visuo-motor development to low-level imitation</i>
15:30 – 16:00	Max Lungarella and Luc Berthouze-- <i>Adaptivity through physical immaturity</i>
16:00 - 16:30	Coffee
<b><i>Theoretical and Conceptual Issues II</i></b> <i>Session Chair: Yiannis Demiris</i>	
16:30 – 17:00	Jessica Lindblom and Tom Ziemke— <i>Social situatedness: Vygotsky and beyond</i>
17:00 – 17:30	Matthew Schlesinger-- <i>A lesson from robotics: Modeling infants as autonomous agents</i>
17:30 – 18:30	INVITED TALK: Juyang (John) Weng and Yilu Zhang-- <i>Developmental Robotics - A New Paradigm</i>
19:30 -	<i>Workshop Dinner (St. Leonards Hall)</i>

### Day 2 (Sunday, August 11)

09:00 – 10:00	<b>INVITED TALK</b> Colwyn Trevarthen -- <i>Can a Robot Hear Music? Can a Robot Dance? Can a Robot Tell What it Knows or Intends to Do? Can it Feel Pride or Shame in Company? -- Questions of the Nature of Human Vitality</i>
10:00 – 10:30	Coffee
<b><i>Sensory-Motor Integration and Imitation II</i></b> <i>Session Chair: Hideki Kozima</i>	
10:30 – 11:00	Yuval Marom, George Maistros and Gillian Hayes-- <i>Toward a mirror system for the development of socially-mediated skills</i>
11:00 – 11:30	Toru Nakata-- <i>Generation of whole-body expressive movement based on somatical theories</i>
<b><i>Complex Skills II</i></b> <i>Session Chair: Hideki Kozima</i>	
11:30 – 12:00	Paulina Varshavskaya-- <i>Behavior-based early language development on a humanoid robot</i>
12:00 – 12:30	Xiao Huang and John Weng-- <i>Novelty and reinforcement learning in the value system of developmental robots</i>
12:30 – 14:00	<b><i>Workshop Lunch (Biddie Milligans)</i></b>
14:00 – 15:30	<i>Business meeting for workshop (Biddie Milligans; all attendees are welcome).</i> <b><i>Agenda: Third EPIROB; Topics: Year (2003 or 2004), Location (North America, Japan, or Europe), Organizing committee, Invited speakers, EPIROB emphasis.</i></b>
16:00 -	Informal activities