

**AAAI FALL SYMPOSIUM 2005**  
***FROM REACTIVE TO ANTICIPATORY COGNITIVE EMBODIED SYSTEMS***  
**SCHEDULE**

**NOVEMBER 4**

**9.00-10.30**

**Invited Talk**

Chair: Cristiano Castelfranchi

Mark Bickhard

*Anticipation and Representation*

**10.30 - Coffee Break**

**11.00-12.30**

**Implicit and Explicit Anticipatory Representations**

Chair: Martin Butz

Kai-yuh Hsiao and Deb Roy

*A Habit System for an Interactive Robot*

Cristiano Castelfranchi

*Mind as an Anticipatory Device: For a Theory of Expectations*

Randal Nelson and Yiannis Aloimonos

*Understanding Activity: Learning the Language of Action*

Commentary by Martin Butz

Open discussion

**12.30 - Lunch**

**2.00-3.30**

**Anticipation in learning and development**

Chair: Deb Roy

Douglas S. Blank, Joshua M. Lewis and James B. Marshall

*The Multiple Roles of Anticipation in Developmental Robotics*

Vishal Soni and Satinder Singh

*Reinforcement Learning of Hierarchical Skills on the Sony Aibo robot*

Josh Bongard and Hod Lipson

*Automatic Synthesis of Multiple Internal Models Through Active Exploration*

Commentary by Deb Roy

Open discussion

**3.30 – Coffee Break**

**4.00-5.30**

**Anticipation and emotions**

Chair: Andrew Ortony

Yoichiro Endo

*Anticipatory and Improvisational Robot via Recollection and Exploitation of Episodic Memories*

Emiliano Lorini and Rino Falcone

*Modeling Expectations in Cognitive Agents*

Carlos Herrera Pérez and Dave Moffat

*Fear: Appraisal of danger or anticipation of harm*

Commentary by Andrew Ortony

Open discussion

**Evening: Opening Reception**

**NOVEMBER 5**

**9.00-10.30 – Invited Talk**

Chair: Andrew Ortony

Stephen Grossberg

*Anticipatory Brain Dynamics in Perception, Cognition, and Action*

**10.30 - Coffee Break**

**11.00-12.30**

**Anticipation in Perception and Attention**

Chair: Christian Balkenius

Paolo Cherubini, Michele Burigo and Emanuela Bricolo

*Inference-driven Mechanisms of Attentional Orienting*

Weilie Yi and Dana H. Ballard

*Routine Based Models of Anticipation in Natural Behaviors*

Michael Felsberg, Per-Erik Forssen, Anders Moe and Gosta Granlund

*A COSPAL Subsystem: Solving a Shape-Sorter Puzzle*

Commentary by Christian Balkenius

Open discussion

**12.30 - Lunch**

**2.00-3.30**

**Anticipation for action control**

Chair: Cristiano Castelfranchi

Oliver Herbort and Martin V. Butz and Joachim Hoffmann

*Towards an Adaptive Hierarchical Anticipatory Behavioral Control System*

Mary Hayhoe, Neil Mennie, Brian Sullivan and Keith Gorgos  
*The Role of Internal Models and Prediction in Catching Balls*

Serin Lee Takashi Kubota and Ichiro Nakatani  
*Situated Action Generator Post-hoc Reconstruction of Plans*

Commentary by Cristiano Castelfranchi  
Open discussion

**3.30 – Coffee Break**

**4.00-5.30**

**Understanding and anticipating action**

Chair: Luca Tummolini

Gutemberg Guerra-Filho, Cornelia Fermuller and Yiannis Aloimonos  
*Discovering a Language for Human Activity*

Frederic Dehais, Alexandre Goudou, Charles Lesire and Catherine Tessier  
*Towards an anticipatory agent to help pilots*

Guido Boella and Leendert van der Torre  
*From the Theory of Mind to the Construction of Social Reality*

Commentary by Luca Tummolini  
Open discussion

**Evening: Plenary Session**

**NOVEMBER 6**

**9.00-10.30**

**Panel**

Chair: Martin Butz

**Surprise in Cognitive Systems**

Mark H. Bickhard , Cristiano Castelfranchi and Andrew Ortony

**10.30 – Coffee Break**

**11.00-12.30**

**MindRACES**

**A European Project on Anticipatory Cognitive Systems**

Chair: Rino Falcone

Patrick Poeltz, Juergen Rattenberger and Georg Dorffner  
*From Reaction to Anticipation: An Artificial Immune System View*

Christian Balkenius  
*The Development of Visual Attention*

**END OF SYMPOSIUM SERIES**