

# Program KI 2005

September 11-14, Koblenz, Germany

Sunday, September 11 <sup>th</sup>			
10:00	<b>Tutorial 2: Connectionist Knowledge Representation and Reasoning</b>	Workshops	
11:30	Coffee Break		
12:00	Tutorial 2 (cont'd)	Workshops	
13:30	Lunch		
14:30	<b>Tutorial 1: Techniques in Evolutionary Robotics and Neurodynamics</b>	Workshops	
16:00	Coffee Break		
16:30	Tutorial 1 (cont'd)	Workshops	
18:00	End of Technical Program	17:30	Fachbereich KI - Leitungssitzung
18:00	BBQ on Campus		

<b>Monday, September 12<sup>th</sup></b>	
9:00	<b>Opening Session</b>
	<b>Invited Talk: 175 Miles through the Desert</b> Sebastian Thrun, University of Stanford
10:30	Coffee Break
11:00	<b>Robotics 1</b>
	<b>Distributed Multi-Robot Localization Based on Mutual Path Detection</b> Vazha Amiranashvili, Gerhard Lakemeyer
	<b>Modeling Moving Objects in a Dynamically Changing Robot Application</b> Martin Lauer, Sascha Lange, Martin Riedmiller
	<b>Heuristic-Based Laser Scan Matching for Outdoor 6D SLAM</b> Andreas Nüchter, Kai Lingemann, Joachim Hertzberg, Hartmut Surmann
12:30	Lunch
14:00	<b>Machine Learning 1</b>
	<b>Design of Geologic Structure Models with Case Based Reasoning</b> Mirjam Minor, Sandro Köppen
	<b>Constrained Linear Regression Models to Predict Interval-valued Data</b> Eufrazio de A. Lima Neto, Francisco de A. T. de Carvalho, Eduarda S. Freire
15:00	Coffee Break
15:30	<b>Diagnosis 1</b>
	<b>Development of Flexible and Adaptable Fault Detection and Diagnosis Algorithm for Induction Motors Based on Self-Organization of Feature Extraction</b> Hyeon Bae, Sungshin Kim, Jang-Mok Kim, Kwang-Baek Kim
	<b>Computing the Optimal Action Sequence by Niche Genetic Algorithm</b> Lin Chen, Jie Huang, Zheng-Hu Gong
16:30	Coffee Break
17:00	<b>Diagnosis 2</b>
	<b>Diagnosis of Plan Execution and the Executing Agent</b> Nico Roos, Cees Witteveen
	<b>Automatic Abstraction of Time-Varying System Models for Model Based Diagnosis</b> Pietro Torasso, Gianluca Torta
18:00	End of Technical Program
18:00	Welcome Reception and more, see Social Program

## Tuesday, September 13<sup>th</sup>

9:00	<b>Invited Talk: Emergent Semantics in Multi-Agent Systems</b> Luc Steels, University of Brussels
10:00	Coffee Break
10:30	<b>Robotics 2</b>
	<b>A Probabilistic Multimodal Sensor Aggregation Scheme Applied for a Mobile Robot</b> Erik Schaffernicht, Christian Martin, Andrea Scheidig, Horst-Michael Gross
	<b>Behavior Recognition and Opponent Modeling for Adaptive Table Soccer Playing</b> Thilo Weigel, Klaus Rechert, Bernhard Nebel
11:30	<b>Neural Networks 1</b>
	<b>Neuro-Fuzzy Kolmogorov's Network for Time Series Prediction and Pattern Classification</b> Yevgeniy Bodyanskiy, Vitaliy Kolodyazhniy, Peter Otto
	<b>Design of Optimal Power Distribution Networks Using Multiobjective Genetic Algorithms</b> Alireza Hadi, Farzan Rashidi
12:30	Lunch
14:00	<b>Machine Learning 2</b>
	<b>On Utilizing Stochastic Learning Weak Estimators for Training and Classification of Patterns with Non-Stationary Distributions</b> B. John Oommen, Luis Rueda
	<b>Noise Robustness by Using Inverse Mutations</b> Ralf Salomon
15:00	Coffee Break
15:30	<b>Cognitive Modelling / Philosophy / Natural Language</b>
	<b>Selecting what is Important: Training Visual Attention</b> Simone Frintrop, Gerriet Backer, Erich Rome
	<b>Why is the Lucas-Penrose Argument Invalid?</b> Manfred Kerber
	<b>On the Road to High-Quality POS-Tagging</b> Stefan Klatt, Karel Oliva
17:00	End of Technical Program
19:00	Conference Dinner

**Wednesday, September 14<sup>th</sup>**

9:00	<b>Neural Networks 2</b>	
	<b>Self-Sustained Thought Processes in a Dense Associative Network</b> Claudius Gros	
	<b>New Stability Results for Delayed Neural Networks</b> Zhang Qiang	
10:00	Coffee Break	
10:30	<b>Planning</b>	<b>Knowledge Representation and Reasoning</b>
	<b>Metaheuristics for Late Work Minimization in Two-Machine Flow Shops with Common Due Date</b> Jacek Blazewicz, Erwin Pesch, Malgorzata Sterna, Frank Werner	<b>Dependency Calculus Reasoning in a General Point Relation Algebra</b> Marco Ragni, Alexander Scivos
	<b>An Optimal Algorithm for Disassembly Scheduling with Assembly Product Structure</b> Hwa-Joong Kim, Dong-Ho Lee, Paul Xirouchakis	<b>A New n-ary Existential Quantifier in Description Logics</b> Franz Baader, Eldar Karabaev, Carsten Lutz, Manfred Theißen
	<b>Hybrid Planning Using Flexible Strategies</b> Bernd Schattenberg, Andreas Weigl, Susanne Biundo	<b>Temporalizing Spatial Calculi</b> Marco Ragni, Stefan Wölfel
	<b>Controlled Reachability Analysis in AI Planning: Theory and Practice</b> Yacine Zemali	<b>Subsumption in EL w.r.t. hybrid Tboxes</b> Sebastian Brandt, Jörg Model
12:30	Lunch	
14:00	<b>Invited Talk: Description Logics in Ontology Applications</b> Ian Horrocks, University of Manchester	
15:00	Coffee Break / End of Conference	

## Social Program

<b>Sunday, September 11<sup>th</sup></b>	
18:00	<b>Barbecue on Campus</b> After the workshops and tutorials on Sunday the AGKI cordially invites you to a BBQ on the campus. From 18:00h (6pm) the participants of KI and MATES come together to enjoy some grilled food and cold drinks. Musical entertainment is provided by a Klezmer Trio from Koblenz.
<b>Monday, September 12<sup>th</sup></b>	
18:00	<b>Welcome Reception</b> The welcome reception will be held on the campus directly after the technical program on Monday. The mayor Dr. Eberhard Schulte-Wissermann and State Secretary Roland Haertel will officially welcome all participants of KI 2005 and MATES 2005, and the city of Koblenz invites you to a glass of local wine and canapés.
-tba-	<b>Squash Tournament</b> The squash tournament will start at about 8pm at the <i>Schängel Squash</i> badminton and squash center. Further details will be announced at the conference.
<b>Tuesday, September 13<sup>th</sup></b>	
19:00	<b>Conference Dinner</b> The Conference Dinner takes place in the Elector's Castle of Koblenz (Kurfürstliches Schloss zu Koblenz). Situated in a spacious park close to the banks of the Rhine, the castle was erected from 1777-86. In the castle an excellent dinner and the beautiful voice of blues and jazz singer <i>Georgina Kazungu</i> await you.
<b>Wednesday, September 14<sup>th</sup></b>	
-tba-	<b>Guided City Tour</b> On Wednesday there will be a guided tour of Koblenz. Discover the narrow alleyways and beautiful squares of Old Town Koblenz and learn about the interesting and colorful history of the city. Further details will be announced during the conference. Please ask at the registration desk