

**IEEE Int. Workshop on Robot and Human Interactive Communication ROMAN 2002
Sept. 25-27 2002, Berlin Germany**

Final Program

**Wednesday, September 25
Morning Sessions**

08:00	09:30	Registration	
09:30	10:15	Opening Session (Plenary Hall)	
		Erwin Prassler (FAW Ulm) - Welcome Note Bernd Reuse (BMBF) - Opening of the Conference Angelika Viets (JDZB) - Welcome Note JDZB Franz Josef Radermacher (FAW Ulm) - MORPHA: Human and Robot a Powerful Team	
10:15	11:00	Invited talk (Plenary Hall) Fumio Harashima (Tokyo Denki University) Interaction and Intelligence Session Chair: M. Buss	
11:00	11:15	Coffee Break	
11:15	12:55	W11: Interaction and Intelligence Session Chairs: A. Ohya, T. Shibata Room: Plenary Hall	W12: Interactive Telepresence and Teleoperation Session Chairs: T. Watanabe, C. Preusche Room: Room A
11:15	11:35	Human Robot Interaction in Mobile Robot Applications <i>A. Ohya</i>	Advanced Autonomous Action Elements in Combination Control of Remote Operation and Autonomous Control <i>T. Matsumaru, K. Hagiwara, T. Ito</i>
11:35	11:55	A Progressive SAW Tactile Display On A PC Mouse Button <i>M. Takasaki, T. Nara, T. Mizuno</i>	Telecommunicator: A Novel Robot System for Human Communication <i>Y. Tsumaki, Y. Fujita, S. Kasai, C. Sato, D. N. Nenchev, M. Uchiyama</i>
11:55	12:15	Basic Study on Human Robot Interaction for Motion Support by Muscle Suit <i>H. Kobayashi, T. Shiiba</i>	Multimodal user interface for remote object exploration with sparse sensory data <i>J. Aleotti, S. Caselli, M. Reggiani</i>
12:15	12:35	Tabulation, Analysis of Questionnaire Results of Subjective Evaluation of Seal Robot at Science Museum in London <i>T. Shibata, K. Wada, K. Tanie</i>	Development of an Immersive Teleoperating System for Unmanned Helicopter <i>M. Koeda, Y. Matsumoto, T. Ogasawara</i>
12:35	12:55		Development of 3D Shape Evaluation System for Collaboration Support in Virtual Space <i>M. Okubo, T. Watanabe</i>
12:55	14:00	Lunch	

Wednesday, September 25

Afternoon Sessions

14:00	16:00	W21: Measuring & Modeling Human Motion & Behavior Session Chairs: K. Kawamura, Y. Kobayashi Room: Plenary Hall	W22: Artificial Emotion/Psychological Aspects Session Chairs: S. Yamada, O.P. Vlad Room: Room A	W23: Haptic Interaction Session Chairs: M. Bergamasco, H.F.M. Van der Loos Room: Room B
14:00	14:20	LabanEditor: Graphical Editor for Dance Notation <i>K. Kojima, K. Hachimura, M. Nakamura</i>	Model Based Emotional Status Simulation <i>O. P. Vlad, T. Fukuda</i>	A Haptic Interface to a Robot to Study Grasp Stability with a Virtual Task <i>H.F.M. Van der Loos, M. E. Johanson, M. A. Broberg, J. G. Houghtaling, H. Cho</i>
14:20	14:40	Analysis of Co-emergence Process on Human-Human Cooperation <i>T. Muto, Y. Miyake</i>	Critical Consideration of Applications of Affective Robots to Mental Therapy from Psychological, Sociological Perspectives <i>T. Nomura, N. Tejima</i>	Absolute stable haptic interaction with the Isotropic Force Display <i>A. Frisoli, M. Bergamasco</i>
14:40	15:00	Evaluation Method of Man-Machine System based on Muscular Characteristic <i>T. Koyama, T. Tanaka, K. Tanaka, M. Q. Feng</i>	Mutual Adaptation to Mind Mapping in Human-Agent Interaction <i>S. Yamada, T. Yamaguchi</i>	A Predictive Wave-Based Approach for Time Delayed Virtual Environment Haptics Systems <i>H. Arioui, A. Kheddar, S. Mammari</i>
15:00	15:20	Development of New Ensemble System based on Coupled Phase Oscillator <i>Y. Kobayashi, Y. Miyake</i>	Design and Evaluation of a Multi-Robot User Interface <i>B. Trouvain, H. L. Wolf</i>	Gravity Compensation Algorithms for Parallel Haptic Interface <i>D. Checcacci, E. Sotgiu, A. Frisoli, C.A. Avizzano, M. Bergamasco</i>
15:20	15:40	The Role of Cognitive Agent Models in a Multi-Agent Framework for Human-Robot Interaction <i>K. Kawamura</i>	A Habituation Mechanism for a Perceptual User Interface <i>J. Lorenzo, M. Hernandez</i>	Six-DOF Sensory System for Interactive Communication on Human Robot Interface <i>Milan Kvasnica</i>
15:40	16:00	Planning in Driver Models using Probabilistic Networks <i>P. Rammelt</i>		
16:00	16:15	Coffee Break		
16:15	17:55	W31: Robots Assistant I Session Chairs: G. Lawitzky, K. Severinson Eklundh Room: Plenary Hall	W32: Philosophical Issues Session Chairs: K. Dautenhahn, C.T. Schmidt Room: Room A	W33: Skill Learning and Skill Transfer Session Chairs: C.A. Avizzano, M. Buss Room: Room B
16:15	16:35	Selection of suitable Human-Robot Interaction Techniques for Intelligent Wheelchairs <i>M. Nuttin, D. Vanhooydonck, E. Demeester, H. Van Brussel</i>	Artifact Intelligence: Yet Another Approach for Intelligent Robots <i>H. Takeda, K. Terada, T. Kawamura</i>	Motor Learning Skill Experiments using HI capabilities <i>C.A. Avizzano, J. Solis, A. Frisoli, G. di Pietro, M. Bergamasco</i>
16:35	16:55	A Network-based Stationeries Rental Service Performed by an Autonomous Mobile Robot <i>S. Soumare, A. Ohya, S. Yuta</i>	A Theoretical Approach to Human-Robot Interaction Based on the Bipolar Man Framework <i>F. Amigoni, V. Schiaffonati, M. Somalvico</i>	Learning object-specific vision-based manipulation in virtual environments <i>A. Matsikis, T. Zoumpoulidis, G.H. Broicher, K.-F. Kraiss</i>
16:55	17:15	Fetch-and-carry with CERO: Observations from a long-term user study with a service robot <i>H. Hüttenrauch, K. Severinson Eklundh</i>	Children's Cognitive Abilities in Construction, Programming Robots <i>B. Caci, A. D'Amico</i>	Human Motion Oriented Control Method for Humanoid Robot <i>H. Imai, M. Nozawa, Y. Kawamura, Y. Sankai</i>
17:15	17:35	LocoMaid (the locomotion aid) – A distributed Planning & Control Architecture <i>A. Sgorbissa, M. Miozzo, P. Morasso, R. Zaccaria</i>	Design Spaces and Niche Spaces of Believable Social Robots <i>K. Dautenhahn</i>	Simultaneous Measurement of the Grip/Load Force, the Finger EMG : Effects of the Grasping Condition <i>Y. Kurita, M. Tada, Y. Matsumoto, T. Ogasawara</i>
17:35	17:55	New intelligent power-assist systems based on differential transmission <i>D. Surdilovic, R. Bernhardt, L. Zhang</i>	Socially Interactive Robots. Why Our Current Beliefs About Them Still Work <i>Colin T. Schmidt</i>	
17:55	18:30	Break		
18:30	20:00	Reception (Cafeteria)		

Thursday, September 26

Morning Sessions

08:30	10:10	T11: Natural Language Based Interaction I Session Chairs: J. Zhang, L.S. Lopes Room: Plenary Hall	T12: Multi-modal Communication Session Chairs: G. v. Wichert, O. Rogalla Room: Room A	T13: Moving in Human Environments Session Chairs: F. Lohnert, M. Bennewitz Room: Room B
08:30	08:50	Converting Natural Language Route Instructions into Robot Executable Procedures <i>S. Lauria, Guido Bugmann, Theo, Johan, J. Bos, E. Klein</i>	Interactive Biped Locomotion Based on Visual/Auditory Information <i>Y. Ogura, Y. Sugahara, Y. Kaneshima, N. Hieda, H. Lim, A. Takanishi</i>	Using EM to Learn Motion Behaviors of Persons with Mobile Robots <i>M. Bennewitz, W. Burgard, S. Thrun</i>
08:50	09:10	Natural Language Instructions for Joint Spatial Reference between Naive Users and a Mobile Robot <i>R. Moratz, T. Tenbrink</i>	Integrated Communicative Robot "BUGNOID" <i>M. Doi, K. Suzuki, S. Hashimoto</i>	RG Mapping: Learning Compact, Structured 2D Line Maps of Indoor Environments <i>D. Schroeter, M. Beetz, S. Gutmann</i>
09:10	09:30	Conversational Agent Who Achieves Tasks While Interacting with Humans Based on Scenarios <i>S. Takata, S. Kawato, K. Mase</i>	Bi-directional Human Machine Interface via Direct Neural Connection <i>M. Gasson, B. Hutt, I. Goodhew, P. Kyberd, K. Warwick</i>	An Error Detection Model for Ultrasonic Sensor Evaluation on Autonomous Mobile Systems <i>D. Bank</i>
09:30	09:50	Integration of Gaze and Gesture Detection in Nature Language Instructing of Robot in an Assembly Scenario <i>T. Baier, J. Zhang, M. Hueser</i>	Multi-robots Cooperation for Human-Robot Communication <i>T. Kanda, H. Ishiguro, T. Ono, M. Imai, K. Mase</i>	Utilization of Distributed Cameras in Environment for Actions of Mobile Manipulator <i>K. Komoriya, T. Kotoku, K. Ohba</i>
09:50	10:10	A prototype speech robotic interface with multimodal feedback <i>M. Haage, S. Schötz, P. Nugues</i>	Sound focusing technology using parametric effect with beat signal <i>I. Ishimaru, R. Hyoudou</i>	
10:10	10:25	Coffee Break		
10:25	12:05	T21: Natural Language Based Interaction II Session Chairs: L.S. Lopes, J. Zhang Room: Plenary Hall	T22: Recognition of Face Expression Session Chairs: Y. Hasegawa, I. Iossifidis Room: Room A	T23: Control of Anthropomorphic Structures Session Chairs: K. Kosuge, K. Nakai Room: Room B
10:25	10:45	Dependable Multimodal Communication and Interaction with Robotic Assistants <i>R. Bischoff, V. Graefe</i>	Generalized Facial Expression of Character Face Based on Deformation Model for Human-Robot Communication <i>T. Fukuda, M. Nakashima, F. Arai, Y. Hasegawa</i>	Development of a Torque Sensing Robot Arm for Interactive Communication <i>M. Hashimoto, T. Hattori, M. Horiuchi, T. Kamata</i>
10:45	11:05	Robotic Receptionist ASKA : A Research Platform for Human-Robot Interaction <i>J. Ido, K. Takemura, Y. Matsumoto, T. Ogasawara</i>	Improving Adaptive Skin Color Segmentation by Incorporating Results from Face Detection <i>J. Fritsch, S. Lang, M. Kleinhagenbrock, G. A. Fink, G. Sagerer</i>	A semianalytic approach to the modeling and control of the biped <i>J. Finat, G. Gonzales-Sprinberg</i>
11:05	11:25	Towards Grounded Human Robot-Communication <i>L.S. Lopes, Q.H. Wang</i>	An approach to the eye contact through the outstaring game niramekko <i>A. Ito</i>	Control of Robot in its Singular Configuration for Human-Robot Coordination <i>K. Nakai, K. Kosuge, Y. Hirata</i>
11:25	11:45	CASIMIRO: A Robot Head for Human-Computer Interaction <i>O.D. Suarez, M. Castrillon, J. Lorenzo, C. Guerra, D. Hernandez, M.Hernandez</i>	Robot Mediated Round Table: Analysis of the Effect of Robot's Gaze <i>M. Imai, T. Kanda, T. Ono, H. Ishiguro, K. Mase</i>	A Mobile Manipulation Task Using Optimal Evolutionary-Based Control <i>S. Sakka, N.K. M'Sirdi</i>
11:45	12:05	Improving the Expressiveness of Mobile Robots <i>L. Mayor, B. Jensen, A. Lorotte, R. Siegwart</i>		Dynamic manipulation of strings for housekeeping robots <i>M. Hashimoto, T. Ichikawa</i>
12:05	13:20	Lunch		

Thursday, September 26

Afternoon Sessions

13:20 14:05	Invited talk (Plenary Hall) Ousama Khatib (Stanford University) Human-centered Robotics and Interactive Haptic Simulation Session Chair: M. van der Loos		
14:05 14:20	Break		
14:20 16:00	T31: Robot Assistants II Session Chairs: A. Stopp, S. Kristensen Room: Plenary Hall	T32: Recognition of Face and Body Expression Session Chairs: F. Hara, T. Watanabe Room: Room A	T33: Medical Robots Session Chairs: G.Thomann, S. Bai Room: Room B
14:20 14:40	The Robotic Bar -- An Integrated Demonstration of Man-Robot Interaction in a Service Scenario <i>Georg von Wichert, C. Klimowicz, W. Neubauer, Th.Wösch, G. Lawitzky, R. Caspari, H.-J. Heger, P. Witschel,</i>	Improving the man-machine interface through the analysis of expressiveness in human movement <i>P. Coletta, A. Camurri, B. Mazzarino, R. Trocca, G.Volpe</i>	A Robotic Neuro-Surgery System and Its Calibration by Using a Motion Tracking System <i>S. Bai, M. Y. Teo</i>
14:40 15:00	Robotic Home Assistant Care-O-bot: Past - Present - Future <i>M. Hans, B. Graf, R.D. Schraft</i>	Multi-Modal Anchoring for Human-Robot-Interaction <i>M. Kleinhagenbrock, J. Fritsch, S. Lang, G. A. Fink, G. Sagerer</i>	The Human-machine Interface Implementation for the Robot-assisted Endoscopic Surgery System <i>S. Zhang, D. Wang, Y. Zhang, Y. Wang, Y. Wang, X. Ma</i>
15:00 15:20	The Manufacturing Assistant: Safe, Interactive Teaching of Operation Sequences <i>A. Stopp, T. Baldauf, R. Hantsche, S. Horstmann, S. Kristensen, F. Lohnert, C. Priem, B. Rüscher</i>	InterActor: Speech-Driven Embodied Interactive Actor <i>T. Watanabe, R. Danbara, M. Okubo</i>	The Design of an Intelligent Surgical Tool for the Intestinal Inspection <i>G. Thomann, T. Redarce, M. Bétemps, O. Blasi</i>
15:20 15:40	Cora: An Anthropomorphic Robot Assistant for Human Environment <i>I. Iossifidis, C. Bruckhoff, C. Theis, C. Grote, G. Schoener</i>		
15:40 16:00	rob@work: Robot Assistants in Industrial Environments <i>E. Helms, R.D. Schraft, M. Hägele</i>		
16:30 20:00	Boat Cruise		
20:00 22:30	Conference Dinner (Plenary Hall)		

Friday, September 27
Morning Sessions

08:30	09:15	<p style="text-align: center;">Invited talk (Plenary Hall) Luc Steels (Sony CSL Paris and VUB AI Lab, Brussels) Evolving grounded communication with humanoid robots Session Chair: K. Kosuge</p>	
09:15	09:30	Coffee Break	
09:30	11:10	F11: Intuitive Instruction of Robots Session Chairs: R. Dillmann, S. Estable Room: Plenary Hall	F12: Cooperative Motion Planning Session Chairs: M. Nuttin, W. Neubauer Room: Room A
09:30	09:50	Using Gesture and Speech Control for Command a Robot Assistant <i>O. Rogalla, M. Ehrenmann, R. Zöllner, R. Becher, R. Dillmann</i>	Cooperative Motion Planning for Dual Arm Robot to Demonstrate Human Arm Movements <i>T. Osone, J. Tatsuno, H. Kobayashi</i>
09:50	10:10	Programming Service Tasks in Household Environments by Human Demonstration <i>M. Ehrenmann, R. Zöllner, O. Rogalla, R. Dillmann</i>	Receiver's Robot Motion for Handing-over with a Human <i>S. Kajikawa, N. Saito, H. Okano</i>
10:10	10:30	Using Spatial Context Knowledge in Gesture Recognition for Commanding a Domestic Service Robot <i>M. Strobel, J. Illmann, B. Kluge, F. Marrone</i>	Optimal Variable Impedance Control for a Robot and Its Application To Lifting an Object with a Human <i>R. Ikeura, T. Moriguchi, K. Mizutani</i>
10:30	10:50	Intuitive Teaching and Surveillance for Production Assistants <i>S. Estable, I. Ahms, H.G. Backhaus, O. El Zubi and R. Münstermann</i>	Fractal Representation of Image Feature Associated with Maneuvering <i>K. Kamejima</i>
10:50	11:10	The MORPHA Style Guide for Icon-Based Programming <i>R. Bischoff, A. Kazi, M. Seyfarth</i>	
11:10	11:25	Coffee Break	
11:25	13:05	F21: Moving in Human Environments II Session Chairs: G. Grunwald, M. Hägele Room: Plenary Hall	F22: Entertainment Robotics Session Chairs: M. Gutierrez, A. Nakayama Room: Room A
11:25	11:45	Motion Coordination in Dynamic Environments: Reaching a Moving Goal while Avoiding Moving Obstacles <i>B. Kluge, D. Bank, E. Prassler</i>	Behavior Control Architecture for a Life-Like Creature: "The Robotaurus" <i>I. Lafoz, A Mora, D. Rodriguez-Losada, M. Hernando, A. Barrientos</i>
11:45	12:05	Non-Holonomic Navigation System of a Walking-Aid Robot <i>H. Wandosell, J. Manuel, B. Graf</i>	Rich Communication with Audio-Controlled Network Robot <i>A. Nakayama, T. Machino, I. Kitagishi, S. Iwaki, M. Okudaira</i>
12:05	12:25	Robot Motion Control for Assistance Tasks <i>T. Wösch, W. Neubauer, G. v. Wichert, Z. Kemeny</i>	A MPEG-4 Virtual Human Animation Engine for Interactive Web Based Applications <i>M. Gutierrez, F. Vexo, D. Thalmann</i>
12:25	12:45	Interactive Modeling of 3D-Environments <i>C. Fröhlich, A. Stephan, I. Heinz, M. Mettenleiter, F. Härtl, G. Dalton, D. Hines</i>	
12:45	13:05	Detecting the gaze direction for a man machine interface <i>C. Theis and K. Hustadt</i>	
13:05	14:05	Lunch	