

Preliminary Congress Schedule

**Attention! This schedule is preliminary, times or rooms may change.
Correct as of June 19, 2006.**

June 30

9:30-10:00, Westfalenhalle Hall 2N
FIRA RoboWorld Cup 2006 Opening Ceremony

10:30-12:00, Congress Centre, Silbersaal
Congress Opening & Keynote Session with Invited Speakers

12:00-13:30
Lunch break

13:30-15:30, Congress Centre, Room 9
Session 1: Localisation, Map Building, Path Planning and Navigation
Session Chairs: Albert Schoute, Ivan Petrović

Self-Orientation of Soccer Robots in Soccer Pitch by Identifying Pitch Lines
Ulf Witkowski, Teerapat Chinapirom and Ulrich Rückert
University of Paderborn, Germany

Collision Detection and Prediction Using a Mutual Configuration State Approach
Albert Schoute
University of Twente, Netherlands

The Use of Ultra Wide Band (UWB) Technology for Localisation and Communication in a Robot Soccer system
Jun Jo, Chan Young Park and Tae Hum Kim
Griffith University, Australia; Hallym University, South Korea; Korea Advanced Institute of Science and Technology, South Korea

A Sensor Fusion Algorithm for Mobile Robot Self Localization and Local Map Alignment
Song Xingyong, Hyun-Ki Lee and Hyungsuck Cho
Korea Advanced Institute of Science and Technology, South Korea

Vision System Design for Accurate Pose Tracking of Multiple Mobile Robots
Mišel Brezak and Ivan Petrović
University of Zagreb, Croatia

Realizations and Experiments of Omni-Wheeled Robotic Wheelchair Design with Autonomous Navigations
Chung-Hsien Kuo, Hayato H.W. Chen and Wei-Chao Wang
Chang Gung University, Taiwan

15:30-16:00, Congress Centre, Room 9
Coffee break

16:00-18:00, Congress Centre, Room 9

Session 2: Multi-Agent System Coordination, Robot Soccer Strategy and Simulation

Session Chair: James Law

The Voronoi Game in Robot Coordination

James Law and Jeffrey Johnson

The Open University, United Kingdom

Studies about Multi-Agent Team Work Coordination in the Robot Soccer Environment

Salvador Ibarra Martínez, Christian Giovanni Quintero Monroy, Josep Antoni Ramón, Josep Lluís de la Rosa and José Antonio Castán Rocha

University of Girona, Spain; Universidad Autónoma de Tamaulipas, México

Observation for Strategic Control Input Expansion

Vaclav Snasel, Jan Martinovic and Bohumil Horak

VŠB - Technical University of Ostrava, Czech Republic

Research Opportunities of Management by Movement Models of the Mobile Robot - Football Player with the Help of Neural Net Algorithms

Alexander Kobrin and Oleg Sinyavsky

Moscow Power Engineering Institute (Technical University), Russia

A General Robot Soccer Simulation Platform for FIRA's MiroSot and Simuosot

Zhongwen Luo, Fan Yang, Lingquan Yang, Yongshun Cai and Weixian Lv

China University of Geoscience, China

Dynamic Task Allocation in Robot Soccer Based on a Modified Adaptive Genetic Algorithm

Yanduo Zhang and Hui Tian

Wuhan Institute of Technology, China

20:00-23:30, Phoenix Hall (see plan on how to get there)

FIRA RoboWorld Congress and Cup 2006 Welcome Party

Open to all Conference and Cup Participants – Name Badge required for entry!!

July 1

10:00-12:00, Congress Centre, Room 9

Session 3: Humanoid Robots

Session Chairs: Jacky Baltes, Peter Kopacek

Affordable Platforms for HuroSot

Jacky Baltes and John Anderson

University of Manitoba, Canada

Hybrid Architecture for Kick Motion of Small-sized Humanoid Robot HanSaRam-VI

Jeong-Ki Yoo, Yong-Duk Kim, Bum-Joo Lee, In-Won Park, Naveen Suresh Kuppaswamy and Jong-Hwan Kim

Korea Advanced Institute of Science and Technology, South Korea

Improvement and Development of Humanoid Soccer Robot NCKU-II

Tzuu-Hseng S. Li, Jhen-Jia Hu, Yu-Te Su, Cheng-Hsiang Kuo, Chia-Ling Hsu and Ming-Feng Lu

National Cheng Kung University, Taiwan

New Concepts for Humanoid Robots

Man-Wook Han and Peter Kopacek

Vienna University of Technology, Austria

Humanoid Soccer Robot Design for FIRA Cup 2006

*Ching-Chang Wong, Chi-Tai Cheng, Kai-Hsiang Huang, Yu-Ting Yang and Hou-Yi Wang
Tamkang University, Taiwan*

Design of Humanoid – Manus-1

*Li Yu Tan and Prahlad Vadakkepat
National University of Singapore, Singapore*

12:00-13:30, Congress Centre, Room 9

Lunch break

13:30-15:15, Congress Centre, Room 9

Session 4: Non-Humanoid Robots

Session Chairs: Ulf Witkowski, Sigrid Hafner

Design of an Omnidirectional Robot for Fira Robosot

*Naveen Kuppaswamy, Se-Hyoung Cho, Daniel Stonier, Sung-Lok Choi and Jong-Hwan Kim
Korea Advanced Institute of Science and Technology, South Korea*

Vision-Based Autonomous Soccer Robot Design

*Ching-Chang Wong, Shih-An Li, Hou-Yi Wang, Hung-Chih Teng, Chih-Cheng Liu, Tien Yu Kuo and Chun-Hsien Liu
Tamkang University, Taiwan; National Tsing Hua University, Taiwan*

Universal Mini-Robot with Micro-Processor and Reconfigurable Hardware

*Tim Kaulmann, Ulf Witkowski, Teerapat Chinapirom and Ulrich Rückert
University of Paderborn, Germany*

Novel Expansion Module for Khepera Soccer Robots

*Andre Kersting, Bernd Schulte, Frank Kellner, Origo Zárate and Sigrid Hafner
South Westphalia University of Applied Sciences, Germany*

Embedded Control System for MiroSot Soccer's Robot

*Jiří Kotzian, Zdeněk Macháček and Vilém Srovnal
VSB - Technical University of Ostrava, Czech Republic*

15:15-15:45

Coffee break

15:45-16:45, Congress Centre, Room 9

Session 5: Robot Control and Robot Communication

Session Chair: Drago Matko

Predictive Control for Robot with Differential Drive

*Gregor Klančar and Igor Škrjanc
University of Ljubljana, Slovenia*

Autonomous MiroSot - The Autonomous Way of Playing MiroSot

*Stefan Krywult, Tobias Deutsch, Markus Bader, Gregor Novak and Abel Gonzales Onrubia
Vienna University of Technology, Austria*

15:45-17:45, Congress Centre, Room 10

Session 6: Team Descriptions

Session Chair: Victor Pakhomov

How Spiritual Machine Works

*Gonzalo Mon, Hernán G. Freedman and Alvaro Castroman
Argentina*

Introducing an Another One MiroSot Robot Soccer System

*Victor Pakhomov and Evgeny Yelkin
Lomonosov Moscow State University, Russia; Movicom Ltd, Russia*

Session 5 continued

Formation Control for Motor Schema Based Multiple Mobile Robots

*Songhao Piao, Bingrong Hong, Qingcheng Huang, Zesu Cai, Chaoxia Shi and Zhen Geng
Harbin Institute of Technology, China*

16:45-18:00, Congress Centre, Room 9

Session 7: Tutorial Papers

Session Chair: Norman Weiss

A Move-Controlling Model for Soccer Robot

*Wei Zhang and Wen Hu
Harbin Shangye University, China*

Modelling of Soccer Robot

*Jakub Hrabec, Petr Honzik, Michal Gajdušek, František Šolc and Robert Grepl
Brno University of Technology, Czech Republic*

The Revision Method for Distorted Image in Global Vision System

*Seung-Hwan Choi, In-Won Park, Se-Hyoung Cho, In-Bae Jeong, Ki-Baek Lee and Jong-Hwan Kim
Korea Advanced Institute of Science and Technology, South Korea*

A Simple Compensation Architecture for System Delay and Missing Data of Robot Soccer System

*DongHun Lee, DoEun Kim, KyungHun Hwang, and TaeYong Kuc
SungKyunKwan University, South Korea*

19:30-22:30, Congress Centre Panorama Lounge

Congress Banquet

Open to Conference Participants only – voucher required

Session 6 continued

Software Structure of a Control System for the MiroSot Soccer Game

*Petr Tucnik, Jan Pokorny, Vilem Srovnal, Jan Kozany and Dalibor Lukas
VSB - Technical University of Ostrava, Czech Republic*

Comparing Multi-Agent Strategies in a Simulated Robot-Soccer Environment: The Uncol Team

*Jonatan Gómez, Wilson Sotomonte and Luis Fernando Ortega
Universidad Nacional de Colombia, Colombia*

Socrates – Team Description Paper

*Pit Khiam Goh, Kum Cheong Leong, Yen Yo Chen and Bao Chen Liao
Nanyang Polytechnic, Singapore*

UAI SimuroSot Team Presentation

*Gonzalo Zabala, Javier Silveira and Facundo Aguirre
Universidad Abierta Interamericana, Argentina*