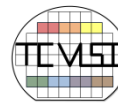
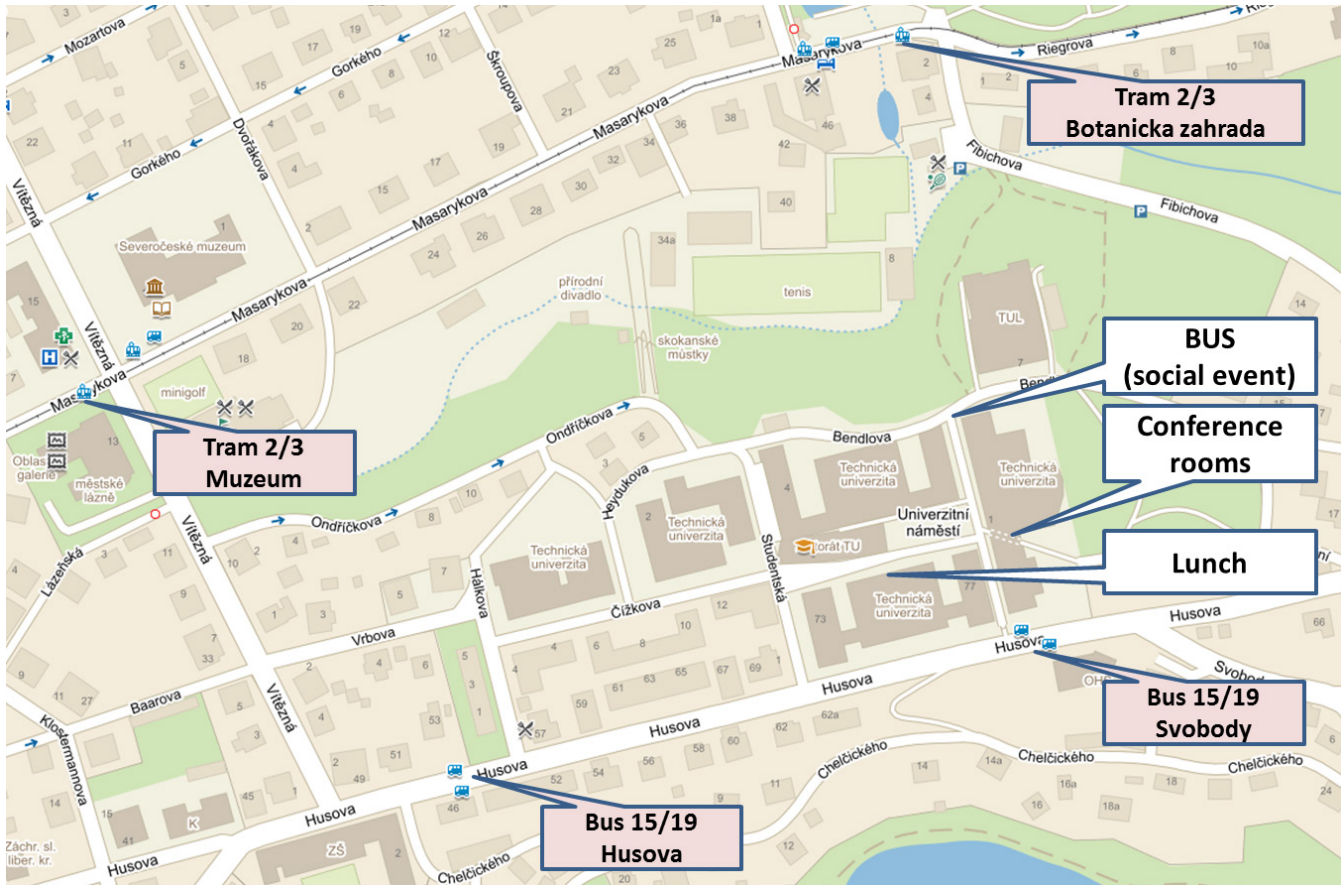


Technical program



**Technical Committee
on
VLSI**



CEZ GROUP



MONDAY 22.6.2015	
8:00	Registration
9:00	OPENING SESSION
9:15	(Invited talk 1) J. SLOUPENSKÝ: Novel sensors in Rieter CZ s.r.o.
S01: Information and Signal processing	
Chair: Z. Koldovsky	
9:45	CHANG, W.T. (R-6): Reactive Near-field Interference Using the Intermodulation of Quartz Oscillators
10:05	NECASEK, J. (S-25): Fast and Portable Precision Impedance Analyzer for Application in Vibration Damping
10:25	JASIKOVA, D. (R-29): Drop movement analysis on inclined surface for the adhesion coefficient determination
10:45	Coffee Break
S02: Information and Signal processing	
Chair: Z. Pliva	
11:15	SAFARIK, R. (S-16): Methods for Rapid Development of Automatic Speech Recognition System for Russian
11:35	BOHAC, M. (R-38): On Automatic Cross-Lingual Subtitle Timing
11:55	MATEJU, L. (S-42): Investigation into the use of deep neural networks for LVCSR of Czech
12:15	CHALOUPKA, J. (S-18): Study on Incorporating Tone into Speech Recognition of Vietnamese
12:35	Lunch
Industry Session	
Chair: Z. Pliva	
13:50	CEZ group: The work in CEZ Group by sight of graduate TU Liberec
14:10	MERZ s.r.o.: Real-time shape-based human detection in moving images (Practical application in a commercial project)
14:30	H-test a.s.: 10 bit oscilloscopes from Keysight Technologies – breakthrough in scope’s signal integrity
14:50	Coffee Break
S03: Information and Signal processing	
Chair: J. Nouza	
15:20	MALEK, J. (R-19): Nonlinear Echo Cancellation using Generalized Power Filters
15:40	VASQUEZOBANDO, P.J. (S-41): Multiscale Texture Analysis of Cervical Tissue for Labor Induction
16:00	BOULAIS, A. (R-54): A geometrical blind separation method for unconstrained-sum locally dominant sources
16:20	break
S04: Mechatronics and Robotic Systems	
Chair: A. Richter	
16:35	SAFKA, J. (R-37): Optimal Tool Path Searching and Tool Selection for Machining of Complex Surfaces
16:55	EICHLER, J. (S-44): Simple Analysis and Use of Preisach Model for Ferromagnetic Materials
17:15	CHATRAEI, A. (R-53): Formation Control of WMRs with Obstacle Avoidance Using Fuzzy Artificial Potential Field
17:35	WELCOME DRINK

TUESDAY 23.6.2015	
9:00	(Invited talk 2) E. SCHAEFERS: Model based control approaches for Machine tools
S05: Mechatronics and Robotic Systems	
Chair: V. Cadenat	
9:30	SEUNGWOO H. (S-9): Design, fabrication, and characterization of piezoresistive strain gage-based pressure sensors for mechatronic systems
9:50	MEJDR, F. (S-17): The Implementation of CNC Control Using Smart Device Controller
10:10	MAESTRO-WATSON, D. (S-39): A Simple Deflectometric Method for Measurement of Quasi-Plane Specular Surfaces
10:30	Coffee Break
S06: Mechatronics and Robotic Systems	
Chair: J. Cernohorsky	
11:00	LANDKAMMER, S. (R-14): Static Modeling of an Antagonistic Pneumatic Actuator for Robotic Applications
11:20	AHMED, S.A. (R-20): Neural Net Tracking Control of a Mobile Platform in Robotized Wireless Sensor Networks
11:40	SHVARTS, A. (S-26): Modified A* Algorithm for Mobile Robot Path Planning in Search Space with Obstacles
S07: Mechatronics and Robotic Systems	
Chair: S. Landkammer	
12:15	JELINEK, J. (S-27): Experimental Issues of the Model of the Enhanced RADIUS Protocol
12:35	BRAIER, Z. (S-21): System of measurement and evaluation of AC servo motor's mechanic, electric and control quantities
12:55	VOJIR, M. (S-33): Global Data Structure for Positioning Machine Controlled by PLC
13:15	Lunch
S08: Mechatronics and Robotic Systems	
Chair: F. Pigache	
14:30	SCHREIBER, R. (S-8): An automatic measurement system for induction motor diagnostics
14:50	FLEURMOND, R. (R-10): A redundancy based control law for executing a coordinated vision-based task using a dual arm robotic system
15:10	BERAN, L. (R-15): Single-Phase Induction Motor Noise Caused by Improper Manufacturer Design
15:30	JAKSCH, I. (R-11): The analysis of induction motor electromagnetic field and shaft revolution oscillations at dynamic rotor faults
17:00	SOCIAL EVENT



WEDNESDAY 24.6.2015	
9:00	(Invited talk 3) H.T.VIERHAUS: Error Resilience in Digital Integrated Circuits
S09: Integrated Circuits and Dependable Systems	
Chair: H.T. Vierhaus	
9:30	KOAL, T. (R-5): Exploring Diagnostic Capabilities of Software-based Self-Tests for Production and In-Field Applications
9:50	SCHOELZEL, M. (R-31): On the feasibility of handling manufacturing faults in embedded memories with software means
10:10	PFEIFER, P. (S-34): On Utilization of BRAM in FPGA for Advanced Measurements in Mechatronics
10:30	Coffee Break
S10: Integrated Circuits and Dependable Systems	
Chair: O. Novak	
11:00	KUKACKA, L. (S-24): Extra Low Voltage DC Grid LED Lighting Systems: Photometric Flicker Analysis
11:20	BRENOT, F. (R-30): FPGA based accelerator for visual features detection
11:40	CVEK, P. (S-35): GNU/Linux and Reconfigurable Multiprocessor FPGA Platform
S11: Computer and Control Systems	
Chair: J. Nosek	
12:00	BRANDT, J. (R-28): Development of the Measurement and Control Module Controlled by a Mobile Device
12:20	HORALEK, R. (R-36): Multiple Model Predictive Control of Solid Oxide Fuel Cell Voltage for Extending Cell Lifetime
12:40	KAHALERRAS, M.K. (S-40): Analyses of temperature influence in piezoelectric transformers dedicated to plasma generation
13:00	GHENNA, S. (R-1): Modelling, identification and control of a Langevin transducer
13:20	CLOSING SESSION
13:35	Lunch

- Conference is organized in the building G (see map on 1st page), on 3rd floor, all presentations are given in room G312.
- Registration desk is located in the entrance hall, just in front of the conference hall.
- Welcome drink is located in the entrance hall, just in front of the conference hall
- Social Event – hotel Ještěd:
 - Bus departure at 17:00 (see map on 1st page for location)
 - Cableway departure at cca 17:45 (Horni Hanychov)
 - Cableway return at cca 21:30
 - Bus return at cca 22:00
- WiFi: **ecmsm2015** for SSID: **ECMSM**