

# *savjetovanja i priredbe*



Uređuje: dr. sc. Davor Bonefačić

## IZVJEŠĆA SA SKUPOVA

### 4. europska konferencija o mobilnim robotima

**ECMR09**

23. – 25. rujna 2009., Mlini/Dubrovnik



Četvrta europska konferencija o mobilnim robotima (4th European Conference on Mobile Robots – ECMR09) održana je od 23. do 25. rujna u hotelu Astarea u Mlinima pokraj Dubrovnika. Organizatori konferencije bili su Fakultet elektrotehnike i računarstva Sveučilišta u Zagrebu, KoREMA, Hrvatsko društvo za robotiku i Hrvatska zajednica tehničke kulture. Glavni predsjedatelj konferencije bio je prof. dr. sc. Ivan Petrović, a predsjednik programskog odbora prof. dr. sc. Achim J. Lilienthal, Örebro University, Švedska. Na konferenciji je sudjelovalo osamdesetak znanstvenika iz Europe i nekoliko izvan Europe.

ECMR se održava svake druge godine, počevši od prve konferencije koja je održana 2003. godine u Radziejowiceama, Poljskoj. Druga je konferencija održana 2005. u Anconi u Italiji, a treća 2007. u Freiburgu u Njemačkoj. Sjedeća, peta, konferencija održat će se 2011. u Örebrou u Švedskoj. Glavni je cilj održavanja ECMR konferencija uspostava Europskog foruma, koji je otvoren i za istraživače izvan Europe, na kojem europski znanstvenici iz područja mobilne robotike razmjenjuju svoja postignuća u području autonomne navigacije mobilnih robota i njihove interakcije s ljudima. Posebno se potiče sudjelovanje mladih znanstvenika koji dobivaju prigodu prezentirati svoje rezultate i o njima raspravljati s kolegama koji se bave vrlo srodnim problemima. Kako bi se ovi ciljevi ostvarili, ECMR konferencija se odvija u jednoj sekciji tako da svi sudionici prate sve prezentacije.



Slika 1. Sudionici konferencije ECMR09 ispred hotela Astarea

Za ECMR09 bilo je prijavljeno 79 radova od 224 autora iz 22 države, što je desetpostotno povećanje u odnosu na prethodne konferencije. Svaki su rad recenzirala tri recenzenta te je na temelju njihovih recenzija Programski odbor prihvatio 49 radova, koji su prezentirani na konferenciji i uključeni u Zbornik radova. Zbornik radova izdan je u elektroničkom i tiskanom obliku. Radovi u zborniku pokrivaju sljedeće istraživačke cjeline mobilne robotike: 3D percepcija, navigacija, planiranje i praćenje putanje, SLAM, istraživanje prostora, višerobotski sustavi te primjene mobilnih robota.

Središnji događaj ECMR09 konferencije bilo je pozvano predavanje „Toward High-level Reasoning for Autonomous Systems“ koje je održao prof. dr. sc. Diter Fox, University of Washington, Seattle, SAD. Prof. Fox je u predavanju dao pregled aktualnih postignuća u razvoju sposobnosti zaključivanja autonomnih sustava o raznim objektima u prostoru i o prostornim konceptima više razine, kao što su sobe, hodnici, ulice i raskrižja. Također je dao vlastiti pogled na očekivani razvoj područja u budućnosti s glavnim znanstvenim izazovima.

Važno mjesto u programu konferencije imao je okrugli stol s raspravom o razvoju novih senzora za mobilne robote i o njihovu utjecaju na razvoj i primjenu autonomnih mobilnih robota u budućnosti. Kao posebnost konferencije želim istaknuti i specifično organiziranu poster sekciju kao kombinaciju znanstvenog i društvenog događanja u



*Slika 2. Profesori Adam Borkowski (ECMR03 Chair), Ivan Petrović (ECMR09 Chair), Wolfram Burgard (ECMR07 Chair), Dieter Fox (ECMR09 Invited Speaker), Primo Zingaretti (ECMR05 Chair) and Achim Lilienthal (ECMR11 Chair) u Dubrovniku neposredno prije svečane večere.*

kojemu su sudionici u ležernoj atmosferi skoro tri sata raspravlјali uz postere s prikazom radova i uz zakusku. Za sudionike konferencije organiziran je izlet brodom do Dubrovnika, gdje je organiziran obilazak znamenitosti staroga grada s vodičima a potom i svečana večera.

Po reakcijama sudionika konferencije s velikim zadovoljstvom i ponosom mogu zaključiti da je ECMR09 bila iznimno uspješna znanstvena konferencija. Od srca zahvaljujem svima koji su mi u tome pomogli.

**Prof. dr. sc. Ivan PETROVIĆ,**  
**Glavni predsjedatelj konferencije ECMR09**

**NAJAVLJUJEMO SKUPOVE**

**ICECom 2010**

**Call for Papers**

**20<sup>th</sup> International Conference on Applied Electromagnetics and Communications**

20 – 23 September 2010                                  Dubrovnik, CROATIA



The conference logo features the text "ICECom 2010" in a large, bold, serif font on the left side. To the right of the logo, there is a dark rectangular area containing the conference title and dates. Below this area is a photograph of a historical stone fortification. To the right of the photograph, there are several logos: the IEEE Region 8 Croatia Section logo, the AP/MTT Croatia Joint Chapter logo, the KoREMA logo, the University of Zagreb logo, and the Faculty of Electrical Engineering and Computing logo.

[www.rc.fer.hr/icecom](http://www.rc.fer.hr/icecom)

The 20<sup>th</sup> International Conference on Applied Electromagnetics and Communications (ICECom 2010) will be held in Dubrovnik, Croatia, 20-23 September 2010 in the Centre for Advanced Academic Studies.

The conference is organized by the IEEE Croatia Section, IEEE AP/MTT Croatia Joint Chapter, KoREMA (Croatian Society for Communications, Computing, Electronics, Measurement and Control), University of Zagreb, Faculty of Electrical Engineering and Computing and University of Dubrovnik with technical co-sponsorship from IEEE Region 8 and EurAAP.

The scope of this biannual conference focuses on advancements and innovations in electromagnetics and communication technology. Invited are papers on the conference topics that will foster interactions among researchers and practitioners from academia and industry in antennas and propagation, microwaves, wireless and optical communications, and other related fields.

**Conference topics:**

- |                                                |                                                 |
|------------------------------------------------|-------------------------------------------------|
| 1. Antenna Theory and Techniques               | 12. Radionavigation and Location-based Services |
| 2. Active and Smart Antennas and Phased Arrays | 13. Ultra Wideband Systems                      |
| 3. Small, Multiband and Fractal Antennas       | 14. Indoor and Outdoor Propagation Modeling     |
| 4. Electromagnetic Fields and Guided Waves     | 15. Mobile and Personal Communication Systems   |
| 5. Microwave and RF Devices and Circuits       | 16. Multipath Characterization and MIMO Systems |
| 6. Metamaterials and EBG Structures            | 17. High-Speed Networks (LAN-s, WAN-s, Optical) |
| 7. Light-Wave Technology and Fiber Optics      | 18. Signal and Image Processing                 |
| 8. Terahertz Technology and Applications       | 19. Biomedical and Industrial Applications      |
| 9. Computational and Numerical Techniques      | 20. Electromagnetic Compatibility and EMI       |
| 10. RFID and Wireless Positioning              | 21. Education in Electromagnetics and Comm's    |
| 11. Radar and Remote Sensing                   | 22. Other related topics                        |

**Important dates:**

Submission of papers      May 24, 2010  
Notification of acceptance    July 1, 2010



**Conference Chair:**  
Juraj Bartolić, Croatia

**Technical Program Committee:**  
Dubravko Babić, USA  
Davor Bonefačić, Croatia  
Jan Carlsson, Sweden  
Özlem Aydin Civi, Turkey  
Nader Enghetta, USA  
Angelo Freni, Italy  
Denis Gracanin, USA  
Sonja Grgić, Croatia  
Silvio Hrabar, Croatia  
Bojan Ivančević, Croatia  
Stefano Maci, Italy  
Asher Madjar, Israel  
Milos Mazanek, Czech Republic  
Robert Nagy, Croatia  
Hisamatsu Nakano, Japan  
Alex I. Nosich, Ukraine  
Custódio Peixeiro, Portugal  
Dragan Poljak, Croatia  
Yahya Rahmat-Samii, USA  
Zbynek Raida, Czech Republic  
Antti Raisanen, Finland  
Daniel Segovia Vargas, Spain  
Anja Skrivervik, Switzerland  
Andreas Stelzer, Austria  
Zvonimir Šipuš, Croatia (**Chair**)  
Boris Tomasic, USA  
Masayoshi Tonouchi, Japan  
Lucio Vegni, Italy

**Conference venue.**

The ICECom 2010 is held at the Centre for Advanced Academic Studies in Dubrovnik.

Address: Don Frana Bulića 4  
HR-20000 Dubrovnik  
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Phone: + 385 20 326 300  
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**Contact and Information.**

KoREMA (for ICECom 2010)  
P.O. Box 473  
HR-10000 Zagreb, Croatia  
Tel: +385 1 6129 869  
Fax: +386 1 6129 870  
E-mail: [icecom2010@fer.hr](mailto:icecom2010@fer.hr)  
Web: [www.rc.fer.hr/icecom](http://www.rc.fer.hr/icecom)

**Submission Guidelines.** The language of the Conference is English. The papers are submitted in their **final form** and are limited to **four A4 pages** including text, references and figures. Detailed paper **submission guidelines** and **paper sample** are available at [www.rc.fer.hr/icecom](http://www.rc.fer.hr/icecom). Disregarding the paper preparation format may result in rejection of otherwise acceptable paper. Papers accepted for presentation will appear in the conference proceedings and will be available in IEEE Xplore. Papers are submitted in electronic form as single file in PDF (Adobe) format by e-mail to: [icecom2010@fer.hr](mailto:icecom2010@fer.hr). The file size is limited to 4 Mb. Paper conversion to PDF must comply with IEEE requirements. An accompanying letter should indicate the proposed topic and contain the complete mailing address, e-mail address, and telephone and fax numbers of the corresponding author. Only the corresponding author will be contacted regarding the submission.

**Venue.** Dubrovnik is situated on the Adriatic coast in southern Croatia and it is famous tourist resort. It has preserved the beauty of a medieval town, and its outstanding cultural and historical monuments have earned it a place on UNESCO's World Heritage List. It has mild Mediterranean climate with 250 sunny days a year (average annual temperature is 17° C; 26° C in summer). Dubrovnik can be reached by plane, bus, ship, or ferry.



**Sponsors.**

Ministry of Science, Education and Sports, R. of Croatia

# ICECom 2010

**Skupovi u organizaciji IFAC-a i IMEKO-a**

<b>Naziv skupa</b>	<b>Vrijeme</b>	<b>Mjesto</b>	<b>Daljnje informacije</b>
IFAC Symposium - Automation in Mining, Mineral and Metal Processing (13th)	02 - 04 August 2010	Cape Town, South Africa	<a href="http://www.ifacmmm2010.com/index.html">http://www.ifacmmm2010.com/index.html</a>
FISITA IFAC Symposium - Advanced Vehicle Control - AVEC 10	22 - 26 August 2010	Loughborough, UK	<a href="http://www.lboro.ac.uk/avec10">http://www.lboro.ac.uk/avec10</a>
ACCA IFAC, IEEE Conference - LACC Latin American Control Conference (in cooperation with IFAC)	24 - 27 August 2010	Santiago, Chile	<a href="http://www.acca2010.usach.cl/">http://www.acca2010.usach.cl/</a>
IFAC Workshop - Periodic Control Systems - PSYCO 2010	26 - 28 August 2010	Antalya, Turkey	<a href="http://www.ifacworkshops.org/">http://www.ifacworkshops.org/</a>
IFAC Workshop - Adaptation and Learning in Control and Signal Processing - ALCOSP 2010	26 - 28 August 2010	Antalya, Turkey	<a href="http://www.ifacworkshops.org/">http://www.ifacworkshops.org/</a>
IFAC Workshop - Discrete Event Systems - WODES 2010	30 August - 01 September 2010	Berlin, Germany	<a href="http://www.wodes2010.org/">http://www.wodes2010.org/</a>
IFAC IFIP, IFORS, IEA Symposium - Analysis, Design, and Evaluation of Human-Machine Systems - HMS	31 August - 03 September 2010	Valenciennes, France	<a href="http://www.univ-valenciennes.fr/IFACHMS2010/">http://www.univ-valenciennes.fr/IFACHMS2010/</a>
IFAC Symposium - Nonlinear Control Systems NOLCOS 2010	01 - 03 September 2010	Bologna, Italy	<a href="http://www.nolcos2010.unibo.it/">http://www.nolcos2010.unibo.it/</a>
IFAC Symposium - Cost Oriented Automation - Affordable Automation Systems - COA 2010	01 - 03 September 2010	Prague, Czech Republic	<a href="http://ifac.cz/coa/">http://ifac.cz/coa/</a>
IMEKO TC1/TC7 13th Symposium "Without measurement no science, without science no measurement"	01 - 03 September 2010	London, UK	<a href="http://imeko.iopconfs.org/index.html">http://imeko.iopconfs.org/index.html</a>
IMEKO TC14 - ISMQC2010 – 10th Symposium on Measurement and Quality Control	05 - 09 September 2010	Osaka, Japan	<a href="http://www.ismqc2010.mech.eng.osaka-u.ac.jp/">http://www.ismqc2010.mech.eng.osaka-u.ac.jp/</a>
IFAC Symposium - Intelligent Autonomous Vehicles, IAV 2010 (7th)	06 - 08 September 2010	Lecce, Italy	<a href="http://iav2010.unile.it/">http://iav2010.unile.it/</a>
IFAC Symposium - Automatic Control in Aerospace - ACA 2010	06 - 10 September 2010	Nara, Japan	<a href="http://www.space.t.u-tokyo.ac.jp/aca2010">http://www.space.t.u-tokyo.ac.jp/aca2010</a>
IFAC IEEE IFIP IMEKO Conference - Management and Control of Production and Logistics - MCPL 2010	08 - 10 September 2010	Coimbra, Portugal	<a href="http://www.dei.uc.pt/MCPL2010">http://www.dei.uc.pt/MCPL2010</a>
IMEKO TC4 - 17th Symposium & 15th International Workshop on ADC Modelling and Testing	08 - 10 September 2010	Košice, Slovakia	<a href="http://www.imeko.tuke.sk/">http://www.imeko.tuke.sk/</a>
IMEKO TC19 - 3rd Symposium "Instrumentation for the Information and Communication Technology Era"	08 - 10 September 2010	Košice, Slovakia	<a href="http://www.imeko.tuke.sk/">http://www.imeko.tuke.sk/</a>
IMEKO TC2 - 19th Symposium on Photonic Measurements	11 - 13 September 2010	Hangzhou, China	e-mail: <a href="mailto:linjz@cjl.edu.cn">linjz@cjl.edu.cn</a>
IFAC ASME Symposium - Mechatronic Systems	13 - 15 September 2010	Boston, USA	<a href="http://engineering.purdue.edu/IFACMech10/">http://engineering.purdue.edu/IFACMech10/</a>
IFAC CSS Workshop - Second Workshop on Estimation and Control of Networked Systems (NecSys'10)	13 - 14 September 2010	Annecy, France	<a href="http://necsyst2010.inrialpes.fr/">http://necsyst2010.inrialpes.fr/</a>

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Savjetovanja i skupovi

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Naziv skupa	Vrijeme	Mjesto	Daljnje informacije
IFAC Symposium - System Structure and Control	15 - 17 September 2010	Ancona, Italy	<a href="http://leibniz.diiga.univpm.it/SSSC10/">http://leibniz.diiga.univpm.it/SSSC10/</a>
IFAC Conference - Control Applications in Marine Systems - CAMS 2010	15 - 17 September 2010	Rostock, Warnemünde, Germany	<a href="http://www.cams2010.uni-rostock.de/">http://www.cams2010.uni-rostock.de/</a>
IFAC Workshop - Intelligent Control Systems WICS 2010	29 September - 02 October 2010	Sinaia, Romania	—
IFAC Workshop - 50 Years of Nonlinear Control and Optimization	30 September- 01 October 2010	London, UK	<a href="http://cap.ee.ic.ac.uk/~astolfi/IFAC_HW_10/">http://cap.ee.ic.ac.uk/~astolfi/IFAC_HW_10/</a>
IFAC Symposium - Telematics Applications TA 2010	05 - 08 October 2010	Timisoara, Romania	<a href="http://www.upt.ro/ta2010">http://www.upt.ro/ta2010</a>
IFAC Workshop - Programmable Devices and Embedded Systems- PDeS 2010	06 - 08 October 2010	Pszczyna, Poland	<a href="http://pdes.polsl.pl/">http://pdes.polsl.pl/</a>
IMEKO TC9 - FLOMEKO 2010 – 15th Conference on Flow Measurement	12 - 14 October 2010	Taipei, Taiwan	<a href="http://www.flomeko2010.iti.org.tw/">http://www.flomeko2010.iti.org.tw/</a>
IFAC Workshop - Fractional Differentiation and its Applications 4th - FDA	18 - 20 October 2010	Badajoz, Spain	<a href="http://ees.fberg.tuke.sk/fda10">http://ees.fberg.tuke.sk/fda10</a>
IMEKO TC10 - 11th Workshop on Smart Diagnostics of Structures	18 - 20 October 2010	Krakow, Poland	e-mail: <a href="mailto:tuhl@agh.edu.pl">tuhl@agh.edu.pl</a>
IFAC Workshop - Supplemental Ways for Improving International Stability - SWIIS 2010	27 - 29 October 2010	Prishtina, Kosovo	<a href="http://www.ubt-uni.net/swiis/">http://www.ubt-uni.net/swiis/</a>
CASIM IFAC Conference - Automation in the Mining Industry - AUTO-MINING2010	10 - 12 November 2010	Santiago, Chile	<a href="http://www.automining2010.com/">http://www.automining2010.com/</a>
IMEKO TC3 - 21st Conference on Measurement of Force, Mass and Torque	21 - 25 November 2010	Pattaya, Thailand	<a href="http://imeko2010.nimt.or.th/">http://imeko2010.nimt.or.th/</a>
IMEKO TC5 - HARDMEKO 2010	21 - 25 November 2010	Pattaya, Thailand	<a href="http://imeko2010.nimt.or.th/">http://imeko2010.nimt.or.th/</a>
IMEKO TC22 - 2nd Meeting on Vibration Measurement	21 - 25 November 2010	Pattaya, Thailand	<a href="http://imeko2010.nimt.or.th/">http://imeko2010.nimt.or.th/</a>
IFAC IEEE Conference - Modelling and Control in Agriculture, Horticulture and Post-Harvest Processing - AGRI-CONTROL 2010	06 - 08 December 2010	Kyoto, Japan	<a href="http://elam.kais.kyoto-u.ac.jp/agricontrol2010/">http://elam.kais.kyoto-u.ac.jp/agricontrol2010/</a>

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