



IEEE RFID 2011 Program Brief – Tuesday, April 12

8:30- 10:00	TUTORIAL / WORKSHOPS	S331 A, B
Tutorial The Basics of RFID or Radiating Without a License (Part I) See tutorial description on page 20 Daniel Dobkin , Enigmatics	S331 A	Workshop 1 RFID Reader Essentials (Part I) See workshop description on page 18 Matthew Reynolds , Duke University
10:00 – 10:15	BREAK	S331 ABCD Hallway
10:15 – 12:00	TUTORIAL / WORKSHOPS	S331 A, B
Tutorial The Basics of RFID or Radiating Without a License (Part II) Daniel Dobkin , Enigmatics	S331 A	Workshop 1 RFID Reader Essentials (Part II) Matthew Reynolds , Duke University
12:00 – 13:00	LUNCH	Outside S331 A
13:00 – 14:30	TUTORIAL / WORKSHOPS	S331 A, B
Tutorial The Basics of RFID or Radiating Without a License (Part III) Daniel Dobkin , Enigmatics	S331 A	Workshop 2 Localization in UHF RFID (Part I) See workshop description on page 19 Daniel Arnitz , Graz University of Technology Klaus Witrisal , Graz University of Technology Pavel Nikitin , Intermec Technologies
14:30 – 14:45	BREAK	S331 ABCD Hallway
14:45 – 16:30	TUTORIAL / WORKSHOPS	S331 A, B
Tutorial The Basics of RFID or Radiating Without a License (Part IV) Daniel Dobkin , Enigmatics	S331 A	Workshop 2 Localization in UHF RFID (Part II) Daniel Arnitz , Graz University of Technology Klaus Witrisal , Graz University of Technology Pavel Nikitin , Intermec Technologies
16:45 – 17:45	RFID Journal LIVE! Keynote Session	S320
17:45 – 18:15	RFID Journal LIVE! Keynote Session	S320
18:15 – 20:30	RFID Journal LIVE! Opening Reception	Exhibit Hall
20:30	IEEE RFID 2011 Reception	Outside S331 A

IEEE RFID 2011 Program Brief – Wednesday, April 13 (Morning)

8:00 – 8:30	SPEAKER BRIEFING	S331 A
8:30 – 9:20	OPENING PLENARY	S330 EFG

<p>Welcome and introduction</p> <p>Opening Remarks</p> <p>Technical Program Overview</p> <p>Presentation of Best Paper Award</p> <p>Poster Session Teaser Talks</p>	<p>Daniel Deavours, General Co-Chair, IEEE RFID 2011</p> <p>Christian Floerkemeier, General Co-Chair, IEEE RFID 2011</p> <p>Dale Thompson, Technical Program Chair, IEEE RFID 2011</p> <p>ODIN Technologies (Best Paper Award Sponsor)</p> <p>Senthilkumar CP, Poster Session Chair, IEEE RFID 2011</p> <p>Poster session authors</p>
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9:20 – 10:30	TECHNICAL SESSIONS	S331 A, B
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<p>Session 1A Antennas and Propagation I</p> <p>A Frequency Signature Based Method for the RF Identification of Letters Taranjeet Singh¹, Smail Tedjini², Etienne Perret², Arnaud Vena³ ¹ Grenoble-INP/LCIS, IN ² Grenoble-INP, FR ³ Grenoble-INP/LCIS, FR</p> <p>Concealable, Low-Cost Paper-Printed Antennas for WISP-Based RFID Tags Mauro Marroncelli¹, Daniele Trincherò², Manos M. Tentzeris³ ¹ IXEM Labs - Politecnico di Torino, IT ² Politecnico di Torino, IT ³ Georgia Institute of Technology, US</p> <p>Optimum Performance for RFID Tag Immersed in Dielectric Media Anusha Kosuru, Daniel Deavours University of Kansas, US</p> <p>Session Chair: Stavros Georgakopoulos, Florida International University, US</p>	<p>S331 A</p>	<p>Session 1B Localization I</p> <p>Bandwidth Dependence of CW Ranging to UHF RFID Tags in Severe Multipath Environments Gang Li¹, Daniel Arnitz², Randolph Ebel¹, Ulrich Muehlmann³, Klaus Witrisal², Martin Vossiek¹ ¹ Clausthal University of Technology, DE ² Graz University of Technology, AT ³ NXP Semiconductors, AT</p> <p>Experimental Evaluation of RFID Gate Concepts Michael Goller¹, Markus Brandner² ¹ RF-IT Solutions GmbH, AT ² Graz University of Technology, AT</p> <p>Holographic Localization of Passive UHF RFID Transponders Robert Miesen, Fabian Kirsch, Martin Vossiek Clausthal University of Technology, DE</p> <p>Session Chair: Gregory Durgin, Georgia Tech, US</p>	<p>S331 B</p>
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10:30 – 10:45	BREAK	S330 EFG
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10:45 – 11:30	KEYNOTE SPEAKER	S330 EFG
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<p>Keynote Speaker</p>	<p>Mark Roberti, Founder and Editor, RFID Journal</p> <p><i>How to Create an RFID-Enabled World – and Make Money Doing It</i></p>
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11:30 – 13:00	LUNCH	Exhibit Hall
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IEEE RFID 2011 Program Brief – Wednesday, April 13 (Afternoon)

13:00 – 14:30	TECHNICAL SESSIONS	S331 A, B
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<p>Session 2A Antennas and Propagation II</p> <p>Exploration of Printing-friendly RFID Antenna Designs on Paper Substrates Jingtian Xi, Hailong Zhu, Terry Ye Hong Kong R&D Center for Logistics and Supply Chain Management, HK</p> <p>Linearly-Tapered RFID Tag Antenna with 40% Material Reduction for Ultra-Low-Cost Applications Botao Shao¹, Qiang Chen¹, Ran Liu², Li-Rong Zheng¹ ¹ Royal Institute of Technology KTH, SE ² Fudan University, CN</p>	<p>S331 A</p>	<p>Session 2B Sensors</p> <p>Reflected Electro-Material Signatures for Self-Sensing Passive RFID Sensors Azhar Hasan, Andrew Peterson, Gregory Durgin Georgia Institute of Technology, US</p> <p>RFID Tag Antenna Based Temperature Sensing in the Frequency Domain Rahul Bhattacharyya¹, Daniel Deavours², Christian Floerkemeier¹, Sanjay Sarma³ ¹ Massachusetts Institute of Technology, US ² University of Kansas, US ³ MIT Auto-ID Center, US</p>	<p>S331 B</p>
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<p>Optimum Wireless Power Transmission Through Reinforced Concrete Structure Shan Jiang, Stavros Georgakopoulos Florida International University, US</p> <p>Dual-Band Channel Gain Statistics for Dual-Antenna Tire Pressure Monitoring RFID Tags Gregor Lasser, Robert Langwieser, Florian Xaver, Christoph F Mecklenbräuer Vienna University of Technology, AT</p> <p>Session Chair: Joshua Smith, Intel Research, US</p>	<p>Temperature-Independent Passive RFID Pressure Sensors for Single-use Bioprocess Components Cheryl Surman¹, Radislav Potyrailo¹, William Morris¹, Tim Wortley², Mark Vincent¹, Rafael Diana¹, Vincent Pizzi¹, Gerard Gach¹ ¹ General Electric, US ² GE Healthcare, US</p> <p>SmartHat: A Battery-Free Worker Safety Device Employing Passive UHF RFID Technology Stewart Thomas¹, Jochen Teizer², Matthew Reynolds¹ ¹ Duke University, US ² Georgia Institute of Technology, US</p> <p>Session Chair: Rich Fletcher, Tagsense, US</p>
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14:30 – 15:00	BREAK	S331 ABCD Hallway
15:00 – 17:00	POSTER SESSION	S331 C-D
Session Chair: Senthilkumar CP, University of Arkansas, US		
18:00 – 20:00	IEEE RFID 2011 Conference Banquet	S330 E

IEEE RFID 2011 Program Brief – Thursday, April 14 (Morning)

8:00 – 8:30	SPEAKER BRIEFING	S331 A
8:30 – 10:30	PLENARY	S330 EFG

<p>Welcome</p> <p>CRFID Update</p> <p>Best Poster Award</p> <p>Featured Speaker</p> <p>Featured Speaker</p> <p>Featured Speaker</p>	<p>Daniel Deavours, General Co-Chair, IEEE RFID 2011</p> <p>Daniel Engels, Chair, IEEE Technical Committee on RFID (CRFID)</p> <p>Senthilkumar CP, Poster Session Chair</p> <p>Jeremy Landt, Transcore</p> <p>Joshua Griffin, Disney Research</p> <p>Faranak Nekoogar, Lawrence Livermore National Labs</p>
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10:30 – 11:00	BREAK	S331 ABCD Hallway
11:00 – 12:30	TECHNICAL SESSIONS	S331 A, B

<p>Session 3A Circuits, Devices & Interrogators S331 A</p> <p>Implementation of an Adaptive Leakage Cancellation Control for Passive UHF RFID Readers Iker Mayordomo, Josef Bernhard Fraunhofer Institute for Integrated Circuits IIS, DE</p> <p>A Polar Transmitter Architecture with Digital Switching Amplifier for UHF RFID Applications Liang Rong, Li-Rong Zheng Royal Institute of Technology KTH, SE</p> <p>A Software Radio-Based UHF RFID Reader for PHY/MAC Experimentation Michael P Buettner, David Wetherall University of Washington, US</p> <p>An Analog Front-End Circuit With Dual-Directional SCR ESD Protection for UHF-Band Passive RFID Tag Ming-Hsien Tsai Taiwan Semiconductor Manufacturing Company, TW</p> <p>Session Chair: Jin Mitsugi, Keio University, JP</p>	<p>Session 3B Localization II S331 B</p> <p>New Measurement Results for the Localization of UHF RFID Transponders Using an Angle of Arrival (AoA) Approach Salah Azzouzi, Markus Cremer, Uwe Dettmar, Rainer Kronberger, Thomas Knie Cologne University of Applied Sciences, DE</p> <p>Phase Difference Based RFID Navigation for Medical Applications Andreas Wille, Magdalena Broll, Susanne Winter Ruhr-Universität Bochum, DE</p> <p>Two-Step Locating System for Harsh Port Environments Hoon Choi, Yeonsu Jung, Yunju Baek Pusan National University, KR</p> <p>High Fairness Reader Anti-Collision Protocol in Passive RFID Systems Carlo Galitto¹, Kamil Cetin¹, Simone Frattasi¹, Nicola Marchetti¹, Neeli Rashmi Prasad², Ramjee Prasad¹ ¹ Aalborg University, DK ² Center for TeleInfrastructure (CTIF), DK</p> <p>Session Chair: Daniel Arnitz, Graz University of Technology, AT</p>
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12:30 – 13:30	LUNCH	Exhibit Hall
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IEEE RFID 2011 Program Brief – Thursday, April 14 (Afternoon)

13:30 – 15:00

TECHNICAL SESSIONS

S331 A,B

<p>Session 4A Antennas and Propagation III</p> <p>Photovoltaic Enhanced UHF RFID Tag Antennas for Dual Purpose Energy Harvesting Alanson Sample, Jeff Braun, Aaron Parks, Joshua R. Smith University of Washington, US</p> <p>Reference Modulation for Calibrated Measurements of Tag Backscatter Daniel G Kuester¹, David Novotny¹, Jeffrey Guerrieri¹, Randal Direen¹, Zoya Popovic² ¹ National Institute of Standards and Technology, US ² University of Colorado at Boulder, US</p> <p>RFID Paperclip Tags Pavel Nikitin, Kodukula Rao, Sander Lam Intermec Technologies, US</p> <p>A Reconfigurable Chipless RFID Tag Based on Sympathetic Oscillation for Liquid-Bearing Applications Botao Shao¹, Qiang Chen¹, Ran Liu², Li-Rong Zheng¹ ¹ Royal Institute of Technology KTH, SE ² Fudan University, CN</p> <p>Session Chair: Daniel Deavours, University of Kansas, US</p>	<p>Session 4B Security and Privacy</p> <p>A2U2: A Stream Cipher for Printed Electronics RFID Tags Mathieu David¹, Damith C. Ranasinghe², Torben Larsen¹ ¹ Aalborg University, DK ² The University of Adelaide, AU</p> <p>Toward Practical Public Key Anti-Counterfeiting for Low-Cost EPC Tags Alex Arbit, Yossef Oren, Avishai Wool Tel Aviv University, IL</p> <p>Where's the Beep? A Case Study of User Misunderstandings of RFID Jennifer King¹, Aylin Selcukoglu² ¹ University of California Berkeley, US ² Conifer Research, US</p> <p>Group Coding of RF Tags to Verify the Integrity of a Group of Objects Yuki Sato, Jin Mitsugi, Osamu Nakamura, Jun Murai Keio University, JP</p> <p>Session Chair: Dale R. Thompson, University of Arkansas, US</p>
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15:00– 15:15

BREAK

S331 ABCD Hallway

15:15 – 16:25

TECHNICAL SESSIONS

S331 A

<p>Session 5A Applications and Software</p> <p>A Systematic RFID Application Platform with Integration Capability for Tour and Exhibition Na Li, Wancheng Ni, Jie Tan Institute of Automation, CAS, CN</p> <p>RFID-CoA: The RFID Tags as Certificates of Authenticity Vasileios Lakafosis¹, Anya Traille¹, Hoseon Lee¹, Edward Gebara¹, Manos M. Tentzeris¹, Gerald R DeJean², Darko Kirovski² ¹ Georgia Institute of Technology, US ² Microsoft Research, US</p> <p>Cooperative CEP-based RFID Framework: a Notification Approach for Sharing Complex Business Events Among Organizations Leonardo Albernaz Amaral, Fabiano Hessel Pontifícia Universidade Católica do Rio Grande do Sul, BR</p> <p>Session Chair: Dale R. Thompson, University of Arkansas, US</p>	
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16:25

CONFERENCE ENDS