

## Day 1

Thursday, July 2, 2015

Mediterranean Room		Aegean Room
Opening Remarks	08:40 - 08:50	
Eye-Opener Talk		
<b>Transitioning HPC Software to Exascale Heterogeneous Computing</b>	08:50 - 09:20	
<a href="#">Wen-Mei Hwu</a> , Li-Wen Chang, Hee-Seok Kim, Abdul Dakkak, Izzat El Hajj, <i>Univ. of Illinois at Urbana-Champaign, USA</i>		
Discussion	09:20 - 09:30	
Session M1	09:30 - 11:10	Session A1
Chair: Korkut Yeğin		Chair: Eduard Ubeda
<b>On-Chip Antenna Design for UWB Applications</b>	09:30 - 09:55	<b>Multilevel Inverse-Based Factorization Preconditioner for Solving Sparse Linear Systems in Electromagnetics</b>
<a href="#">Anil Özdemirli</a> , <i>Yeditepe Univ., Turkey</i> ; Mustafa Murat Bilgiç, <i>Unitest, Turkey</i> ; Bora Tar, <i>Migros, Turkey</i> ; Korkut Yeğin, <i>Ege Univ., Turkey</i> ; Uğur Çilingiroğlu, <i>Yeditepe Univ., Turkey</i>		Yiming Bu, Bruno Carpentieri, <a href="#">Zhaoli Shen</a> , <i>Univ. of Groningen, The Netherlands</i> ; Tingzhu Huang, <i>UESTC, China</i>
<b>A Circular Polarized Antenna with Electromagnetic Bandgap Structures</b>	09:55 - 10:20	<b>Preconditioner for a Scattering Solver Based on the Intrusive Stochastic Galerkin Method Accelerated with MLFMM</b>
<a href="#">Alican Uysal</a> , <i>Cevdet Işık, Istanbul Technical Univ., Turkey</i>		<a href="#">Zdravko Zubac</a> , Jan Fostier, Daniël De Zutter, Dries Vande Ginste, <i>Ghent Univ., Belgium</i>
<b>Fifth Generation (5G) Antenna Using an EBG Structure</b>	10:20 - 10:45	<b>On the Non-Conformal Domain Decomposition Algorithms of FE-BI-MLFMA for 3-D Electromagnetic Scattering and Radiation Problems</b>
Almir Souza e Silva Neto, Artur Luis Torres de Oliveira, Antonio de Paula Dias Queiroz, Laís de Macedo Dantas, Joicy dos Santos Silva, <i>Federal Inst. of Educ. Sci. and Technol. of Paraíba, Brazil</i> ; Humberto César Chavez Fernandes, <i>Federal Univ. of Rio Grande do Norte, Brazil</i>		Hong-Wei Gao, Ming-Lin Yang, <a href="#">Xin-Qing Sheng</a> , <i>Beijing Institute of Technology, China</i>
<b>Engineering Photonic Nanoscale Generation</b>	10:45 - 11:10	<b>Parallel Out-of-Core MLFMA on Distributed-Memory Computer Architectures</b>
Ibrahim Mahariq, <i>Univ. of Turkish Aeronautical Assoc., Turkey</i> ; <a href="#">Neslihan Eti</a> , Hamza Kurt, <i>TOBB Univ. of Econ. and Technol., Turkey</i>		Mert Hidayetoğlu, <a href="#">Levent Gürel</a> , <i>ABAKUS Computing Technologies, Turkey</i>
Coffee Break	11:10 - 11:30	Coffee Break
Session M2	11:30 - 12:45	Session A2
Chair: Dan Jiao		Chair: Dan Weile
<b>A Simple and Robust Technique to Retrieve the Effective Refractive Index of Heterogeneous Dielectrics for Millimeter-Wave Applications</b>	11:30 - 11:55	<b>Versatile Facet-Oriented Discretization of the Electric-Field Integral Equation</b>
<a href="#">Abdul Aziz</a> , <i>The Islamia Univ. of Bahawalpur, Pakistan</i> ; Ladislav Matekovits, <i>Politecnico di Torino, Italy</i> ; Aldo De Sabata, <i>Univ. of Timisoara, Romania</i>		<a href="#">Eduard Ubeda</a> , Ivan Sekulic, Juan Rius, Alex Heldring, <i>Politécnica de Catalunya, Spain</i>
<b>Analysis of Scattering from Perfect Electric Conducting Cylinders by Spectral Element Method</b>	11:55 - 12:20	<b>Amplifying the Response of a Buried Object by Depositing a Passive Layer on the Ground</b>
<a href="#">Ibrahim Mahariq</a> , <i>Univ. of Aeronautical Assoc., Turkey</i> ; Ibrahim Arpacı, <i>Gaziosmanpaşa Univ., Turkey</i> ; Mustafa Kuzuoglu, <i>METU, Turkey</i>		Constantinos A. Valagiannopoulos, <a href="#">Aalto Univ., Finland</a> ; <a href="#">Nikolaos Tsitsas</a> , <i>Aristotle Univ. of Thessaloniki, Greece</i> ; Ari H. Sihvola, <i>Aalto Univ., Finland</i>
<b>Micro-Doppler Radar for Human Breathing and Heartbeat Detection</b>	12:20 - 12:45	<b>A Hybrid Model for Electromagnetic Scattering from 3-D Objects with Half-Space Background</b>
İsmail Şişman, <i>Yeditepe Univ., Turkey</i> ; Anil Onur Canbaz, <i>TOFAŞ, Turkey</i> ; <a href="#">Korkut Yeğin</a> , <i>Ege Univ., Turkey</i>		<a href="#">Yefei Lin</a> , Zaijing Nie, Xiaofeng Que, <i>UESTC, China</i>
Discussion	12:45 - 12:55	Discussion

## Day 2

Friday, July 3, 2015

Mediterranean Room		Aegean Room
Session M3	08:35 - 10:40	Session A3
Chair: Wen-Mei Hwu		Chair: Nikolaos Tsitsas
<b>An MPI/OpenMP Implementation of the Hierarchical Parallelization of MLFMA</b>	08:35 - 09:00	<b>A Separated Potential Integral Equation for Low-Frequency PMCHWT</b>
Mert Hidayetoğlu, <a href="#">Levent Gürel</a> , <i>ABAKUS Computing Technologies, Turkey</i>		<a href="#">Arkaprovo Das</a> , Dipanjan Gope, <i>Indian Institute of Science, India</i>
<b>Fast Computational Techniques Applied to Numerical Modeling of RFX-Mod Fusion Device</b>	09:00 - 09:25	<b>Direct Domain Decomposition for On-Board Spacecraft Antennas Based on Spherical Ports</b>
Domenico Abate, Lucio Barbato, <i>Univ. di Cassino e del Lazio, Italy</i> ; <a href="#">Bruno Carpentieri</a> , <i>Univ. of Groningen, The Netherlands</i> ; Guiseppe Marchiori, Nicolò Marconato, <i>Consorzio RFX, Italy</i> ; Stefano Mastrostefano, Stefano Ventre, Fabio Villone, <i>Univ. di Cassino e del Lazio, Italy</i>		Pedro Robustillo, <i>EPFL, Switzerland</i> ; <a href="#">Jesus Rubio</a> , <i>Univ. de Extremadura, Spain</i> ; Juan Zapata, <i>Univ. Politécnica de Madrid, Spain</i> ; Juan R. Mosig, <i>EPFL, Switzerland</i>
<b>Massive Computation of Singular Values of Small Matrices on GPUs</b>	09:25 - 09:50	<b>Wireless Power Transfer via Spiral Metamaterials</b>
<a href="#">Amedeo Capozzoli</a> , Claudio Curcio, Salvatore Di Donna, Angelo Liseno, <i>Univ. di Napoli, Italy</i>		<a href="#">Aronios X. Lalas</a> , Nikolaos V. Kantartzis, Theodoros D. Tsioukas, <i>Aristotle Univ. of Thessaloniki, Greece</i>
<b>Comparative Benchmarking: Matrix Multiplication on a Multicore Coprocessor and a GPU</b>	09:50 - 10:15	<b>Experimental Benchmarking of Unstructured Transmission Line Modelling (UTLM) Method for Simulations of Explicitly Meshed Wiring</b>
<a href="#">Maryam Salim</a> , <i>Bilkent Univ., Turkey</i> ; Ali Orhun Akkirman, Mert Hidayetoğlu, <a href="#">Levent Gürel</a> , <i>ABAKUS Computing Technologies, Turkey</i>		<a href="#">Xuesong Meng</a> , Phillip Sewell, Ana Vukovic, Zhewen Zhang, Trevor Benson, <i>Univ. of Nottingham, UK</i>
Coffee Break	10:15 - 10:40	Coffee Break
Session M4	10:40 - 11:00	Session A4
Chair: Bruno Carpentieri		Chair: Amedeo Capozzoli
<b>On the Use of a Loop-Tree Decomposition Method for the Elimination of Solenoidal Error in Time Marching</b>	11:00 - 11:25	<b>Analytical Regularization Method for Arbitrary Hollow Waveguides with Spline-Parameterized Cross Sections</b>
<a href="#">Daniel S. Weile</a> , <i>Univ. of Delaware, USA</i>		Turker Topal, Yury A. Tuchkin, <a href="#">Olga Suvorova</a> , Fatih Dikmen, <i>Gebze Technical Univ., Turkey</i>
<b>Unconditionally Stable Explicit Time-Domain Methods</b>	11:25 - 11:50	<b>Arbitrary Profile Cylindrical Reflector Surface with Two Different Impedance Faces Illuminated by a Complex Line Source: E-Polarization Case</b>
<a href="#">Dan Jiao</a> , <i>Purdue Univ., USA</i>		<a href="#">Taner Oguzer</a> , <i>Dokuz Eylül Univ., Turkey</i> ; Fadil Kuyucuoglu, <i>Celal Bayar Univ., Turkey</i> ; Ibrahim Avgin, <i>Ege Univ., Turkey</i>
<b>A Generalized Uniform Theory of Diffraction Method for Complex Illumination Sources Accounting for Multiply-Diffracted Rays</b>	11:50 - 12:15	<b>Remedy for Inverse Scattering Problems via Space-Mapping Inverse-Difference Approach</b>
<a href="#">Giorgos Karagounis</a> , Daniël De Zutter, Dries Vande Ginste, <i>Ghent Univ., Belgium</i>		Ahmet Aydoğan, <i>Marmara Univ., Turkey</i> ; <a href="#">Funda Akleman</a> , <i>Istanbul Technical Univ., Turkey</i>
<b>The Mixed Spectral Element Method: A Novel Approach to Remove Zero Spurious Modes in Electromagnetics</b>	12:15 - 12:40	<b>Leveraging Prior State in 3-D Full-Wave RF Imaging via Levenberg-Marquardt Algorithm</b>
Na Liu, Wei Jiang, Yueqin Huang, <a href="#">Qing Huo Liu</a> , <i>Duke Univ., USA</i>		<a href="#">Harikiran Muniganti</a> , Dipanjan Gope, <i>Indian Institute of Science, India</i>
<b>A Miniature Implantable Microstrip Antenna Design for Dual-Band Biotelemetry Operations</b>	12:40 - 13:05	<b>Imaging Multiple Objects with Time-Reversed FDTD Method at Microwave Range</b>
Erdem Uras, <a href="#">Mustafa H. B. Ucar</a> , Adnan Sondas, <i>Kocaeli Univ., Turkey</i>		<a href="#">Cemile Bardak</a> , <i>Celal Bayar Univ., Turkey</i> ; Mohammad Saed, <i>Texas Tech Univ., USA</i> ; Sezai Taşkın, <i>Celal Bayar Univ., Turkey</i>
Discussion	13:05 - 13:15	Discussion
Closing Remarks	13:15 - 13:30	