

Preliminary Conference Program - June 29th 2015

17:00 - 20:00 hrs Registration

18:30 - 22:00 hrs Networking Event incl. dinner (hotel)

Preliminary Conference Program - June 30th 2015

08:00 - 09:00 hrs Registration

Everest 1

09:00 Welcome, Greetings
Thomas Gessner, Fraunhofer ENAS, Germany

Keynote session

Chair: T. Geßner

09:10 Banmali Rawat - University of Nevada, Reno
Two Dimensional Array of Nano Magneto-optic Ferrite Thin Films for a Variable MUX/DEMUX Applications in Optical Communication

09:35 Frank Fitzek - Technische Universität Dresden; 5G Labs Germany
5G Next Generation Mobile Communication

10:00 Olfa Kanoun - Technische Universität Chemnitz
Impedance Spectroscopy for Measurement and Sensor Solutions

10:25 - 10:50 hrs Coffee Break

Session 1

Communication 1

Chair: D. Plettemeier

10:50 Invited: T. Thieme, memsfab GmbH
Challenges of the Internet of Things for sensor applications, wireless communication and new solutions of energy supply

11:15 W-E. Kassa, S. Faci, A-L Billabert and C. Algani
Equivalent Circuit Model of Heterodyne Radio-over-Fiber Systems for Transmission of Wireless Signals in the 60GHz Band

11:30 M. F. U. Haque, T. Johansson and D. Liu
Modified Band-Limited Pulse-Width Modulated Polar Transmitter

11:45 K.S. Sunduchkov, N.S. Bubnov, A.L. Golik and A.K. Sunduchkov
About the development of 4G mobile communication with high speed subscribers

12:00 - 13:30 hrs Lunch Break

Session 2

Components / Systems 1

Chair: O. Kanoun

13:30 G. Lee, Y. S. Noh and W. S. Park
Coupling of RF Signals on Parallel-Wire Power Line

13:45 Y. K. Cho, H. W. Son, D. H. Han, J. H. Ko and S. Nam
Enhancing The Near Field and Transmission Efficiency through Subwavelength Apertures

14:00 S. Colangeli, W. Ciccognani, P. E. Longhi and E. Limiti
An active low-noise termination in GaN technology

14:15 J. Damas, N. Neumann and D. Plettemeier
Printed Circuit Board Intermediate Frequency Radio over Fiber Central Station

14:30 J. Rupprecht, G. Mangalgi, S. Kurth, M. Meinig, A. Hackner, U. Prechtel and T. Gessner
Oxygen detection by rotational spectroscopy with a small size millimeter wave resonator

14:45 A. Chinig, J. Zbitou, A. Errkik, L. E. Abdellaoui, A. Tajmouati and M. Latrach
A Novel Design of An H-shaped Microstrip Diplexer

15:00 I. Chaour, C. Viehweger, O. Kanoun and A. Fakhfakh
High Efficiency RF-DC Converter Circuit for Low Power RF Energy Harvesting

15:15 - 15:45 hrs Coffee Break

Session 3 Technologies / Methods / Materials 1 Chair: B. S. Rawat	
15:45	K. Uchida and Barolli Leonard <i>Discrete Ray Tracing Based on Dijkstra Algorithm for Diffraction and Reflection</i>
16:00	M. Frongillo, G. Gennarelli and G. Riccio <i>TD-UAPO Diffraction Coefficients for Wedges with Arbitrary Apex Angles</i>
16:15	M. Mütze, M. Laabs and W.-S. Benedix and D. Plettemeier <i>Phase Reconstruction for Direct Conversion Receiver based Scalar Network Analyser</i>
16:30	K. Watanabe <i>Comparative Study of Several Formulations Based on the Differential Theory of Surface-Relief Grating</i>
16:45	Y. Miyazaki <i>Functional Dynamic Characteristics of Optical Waves in Transverse Acousto-Optic Waveguide Devices Using High Speed SAW</i>
17:00	H. Hamouche and M. M. Shabat <i>Silicon-Metamaterial waveguide structure model for solar cell energy</i>
17:15	D.J. Coisson, B.S. Rawat, and J. Pistora <i>Analysis of Magneto Optic Materials for Optimal Beam Deflection</i>
17:30	K. Yasumoto, V. Jandieri, H. Cao and Y. Liu <i>Surface Plasmon Resonances in Finite Periodic Array of Circular Silver Nanowires</i>
19:00 hrs Conference Dinner	
Preliminary Conference Program - July 1st 2015	
08:00 - 09:00 hrs Registration	
Keynote session Chair: T. Geßner	
09:05	Prof. Ernesto Limiti - Università degli Studi di Roma Tor Vergata <i>Microwave devices using diamond as a semiconductor material</i>
Session 4 Technologies / Methods / Materials 2 Chair: R. Streiter	
09:30	R. Balasubramanian, Y. Miyazaki and N. Goto <i>FDTD Analysis of Optical Functional Characteristics of Transverse A-O Waveguide Using SAW</i>
09:45	J. Pištora, T. Fördös, M. Lesňák and M. Kolenčik <i>Exact surface-plasmon polariton solutions at a lossy interface with induced anisotropy</i>
10:00	R. Hedara, A. Flotti and D.-E. Kalaidki <i>Modeling of devices and light coupling based on photonic bidimensionnels crystals</i>
10:15	R. S. Tomar, A. Bhadauria, E. K. Sharma and A. K. Verma <i>CAD Based w/h Dependent FEM Analysis of Optically Controlled MIS Slow Wave Line</i>
10:30 - 11:00 hrs Coffee Break	
Session 5 Components / Systems 2 Chair: R. Zichner	
11:00	A. E. Hamdouni, J. Zbitou, A. Tajmouati, A. Errkik, H. Bennis and M Latrach <i>Design and Analysis of A Novel Planar Ultra-Wideband Fractal Antenna</i>
11:15	M.A.Hassanien, M. Jennings and D. Plettemeier <i>Compact Two-Layer Rotman Lens-Fed Microstrip Antenna Array at 60 GHz</i>
11:30	LS. Yang, T. Li and K. Yoshitomi <i>Compact planar eight-element MIMO antenna system for LTE2300/2.4GHzWLAN applications</i>
11:45	A. Benchirouf, A. Sanli, R. Zichner, C. Müller and O. Kanoun <i>Flexible Strain Sensor based Microstrip Patch Antenna</i>

12:00	V.R.Anitha <i>A Patch Antenna Based on Novel Split Ring Resonator (SRR) With Increased Bandwidth and Radiation Efficiency</i>
12:15	H. Kumar and G. Kumar <i>Design and Parametric Analysis of Pyramidal Horn Antenna with High Efficiency</i>
12:30	P. K. Mishra, D. R. Jahagirdar and G. Kumar <i>Effect of Superstrate on High Gain Space-fed Antenna Arrays</i>
12:45 - 13:45 hrs Lunch Break	
Session 6 Components / Systems 3 Chair: S. Kurth	
13:45	T. Haugwitz, N. Neumann and D. Plettemeier <i>Tunable optical cross dipole antenna</i>
14:00	V. Srinivasa Rao, M. Arrawatia, D. R. Jahagirdar and G. Kumar <i>Broadband Planar Triangular and Circular Bi-directional Antennas</i>
14:15	J.A.G. Malherbe <i>Dual Band Bandpass Filter with Shunt Shorted Stubs</i>
14:30	D. Ghosh and G. Kumar <i>High Isolation Dual Three Branch Microstrip Couplers</i>
14:45	Y. Itoh, N. Mizuo and A. Ohta <i>An L-Band 4-bit SiGe HBT Active Differential Equalizer Using Capacitance-Selectable Bridged-T Attenuators</i>
15:00	K.-C. Peng and C.-H. Lee <i>A Novel Phase-imbalance Tracking Demodulator for OFDM Applications</i>
15:15 - 15:45 hrs Coffee Break	
Session 7 Components & Applications Chair: T. Otto	
15:45	M. V. Swati, M. S. Chauhan and P. K. Jain <i>Time-Dependent Nonlinear Analysis of a Second Harmonic Gyroklystron Amplifier</i>
16:00	G. Polli, M. Palomba, S. Colangeli, R. Cleriti and Ernesto Limiti <i>A GaAs MMIC Active Inductor for Notch Filtering up to K-Band</i>
16:15	L. Scucchia, M. Palomba, W. Ciccognani, S. Colangeli and E. Limiti <i>Realization and Measure of an RF Energy Harvesting Circuit Operating on Several DVB-T Channels</i>
16:30	J.A.G. Malherbe and K. Kekana <i>Ultra Wideband Pseudo-Elliptic Bandstop Filter with Stepped Impedance Stubs</i>
16:45	R. Giofrè, P. Colantonio, E. Cipriani, R. Danieli, F. Giannini, L. Gonzalez, F. De Arriba, L. Cabria and D. Baglieri <i>Evaluation of GaN technology for Galileo Satellite System</i>
17:00	R. Streiter and G. Wanielik <i>Bayesian Approach of Integrity GNSS for Automated Driving and Advanced Driver Assistance Systems</i>
17:15	R. A. Bean and B. S. Rawat <i>A Stable, Ambient Energy Source for Harvesting Electricity from Heat Radiation</i>
17:30	M.F. Rosa, D. Ferenci, T. Föhn, W. Vogel, M. Berroth, M. Kaschel, M. Schmid, M. Oehme, E. Kasper and J. Schulze <i>High speed opto-electronic receiver with a 3-dB bandwidth of 22 GHz</i>