Monday	Tuesday	Wednesday	Thursday
25/09/17	26/09/17	27/09/17	28/09/17
08:00 - 09:00	08:30 - 09:10	08:30 - 09:10	09:00 – 10:00
Registration	Design and Development of Some Novel Phased Arrays and Anti-Jamming Antennas Prof. Satish Sharma, San Diego State University, USA	Leaky-Wave Antennas: From Niche Applications to Mass Market Prof. Karu Esselle, Macquarie University, Australia	
09:00 – 09:30	09:10 – 10:30	09:10 – 10:30	Computational Electromagnetics
Opening Ceremony	Radio Astronomy III	Couplers, Waveguides and Resonators I	•
Coffee Break 09:30 – 10:00	Coffee Break 10:30 – 10:50	Coffee Break 10:30 – 10:50	Coffee Break 10:00 – 10:20
10:00 – 12:00 Workshop: SKA Africa Human Capacity Building	10:50 – 11:30	10:50 – 12:30	10:20 – 11:50
Maxwell's Equations and Electromagnetics after 150+ Years Prof. Weng Cho Chew, University of Illinois, USA	Antenna Design: Early History, Basic Considerations and Recent Developments Prof. Zhongxiang Shen, Nanyang Technological University, Singapore	Couplers, Waveguides and Resonators II	Biological Effects and Medical Applications of EMF
Calculation of Far-Field Radiation Pattern Using Nonuniformly Spaced Antennas by a Least Square Method Prof. Tapan K. Sarkar, Syracuse University, USA	11:30 – 12:30		
Low-Frequency Radio Astronomy Engineering in Western Australia Dr. Adrian Sutinjo, International Centre for Radio Astronomy Research, Australia	Antenna Design		
LUNCH 12:00 – 13:00	LUNCH 12:30 – 13:30	LUNCH 12:30 – 13:30	LUNCH 12:00 – 13:00
13:00 – 14:20 Workshop: SKA Africa Human Capacity Building	13:30 – 14:10	13:30 – 14:50	13:00 – 15:40 Workshop: The Financial and Technical Implications of Counterfeit Devices
The State-of-the-Art Research on UWB Eleven Feed and			
QRFH Feed in a Perspective of SKA Prof. Jian Yang, Chalmers University of Technology, Sweden	Metamaterials: Optical Properties on Demand Prof. Nikolay I. Zheludev, Southampton University, UK		The Economic Cost of IPR infringement in the Smartphone Sector Carolina Arias Burgos, EUIPO
QRFH Feed in a Perspective of SKA Prof. Jian Yang, Chalmers University of Technology, Sweden Spanish Contribution to the SKA Project: Mid-Frequency Band Array	Demand		Smartphone Sector Carolina Arias Burgos, EUIPO The Challenges and Concerns posed by Counterfeit Devices
QRFH Feed in a Perspective of SKA Prof. Jian Yang, Chalmers University of Technology, Sweden Spanish Contribution to the SKA Project: Mid-Frequency	Demand Prof. Nikolay I. Zheludev, Southampton University, UK 14:10 – 15:50	Wireless Communication Systems	Smartphone Sector Carolina Arias Burgos, EUIPO The Challenges and Concerns posed by
QRFH Feed in a Perspective of SKA Prof. Jian Yang, Chalmers University of Technology, Sweden Spanish Contribution to the SKA Project: Mid-Frequency Band Array Prof. Magdalena Salazar-Palma, Carlos III University of Madrid, Spain	Demand Prof. Nikolay I. Zheludev, Southampton University, UK	Wireless Communication Systems	Smartphone Sector Carolina Arias Burgos, EUIPO The Challenges and Concerns posed by Counterfeit Devices Michael Milligan, Mobile & Wireless Forum
QRFH Feed in a Perspective of SKA Prof. Jian Yang, Chalmers University of Technology, Sweden Spanish Contribution to the SKA Project: Mid-Frequency Band Array Prof. Magdalena Salazar-Palma, Carlos III University of Madrid, Spain 14:20 – 15:20	Demand Prof. Nikolay I. Zheludev, Southampton University, UK 14:10 – 15:50	Wireless Communication Systems Coffee Break 14:50 – 15:10	Smartphone Sector Carolina Arias Burgos, EUIPO The Challenges and Concerns posed by Counterfeit Devices Michael Milligan, Mobile & Wireless Forum Addressing the Illegal Device Ecosystem Mohammad Raheel Kamal, Qualcomm Combating Counterfeit Devices at ITU/International and Regional Level
QRFH Feed in a Perspective of SKA Prof. Jian Yang, Chalmers University of Technology, Sweden Spanish Contribution to the SKA Project: Mid-Frequency Band Array Prof. Magdalena Salazar-Palma, Carlos III University of Madrid, Spain 14:20 – 15:20 Radio Astronomy I	Demand Prof. Nikolay I. Zheludev, Southampton University, UK 14:10 – 15:50 Wave Propagation and Scattering I		Smartphone Sector Carolina Arias Burgos, EUIPO The Challenges and Concerns posed by Counterfeit Devices Michael Milligan, Mobile & Wireless Forum Addressing the Illegal Device Ecosystem Mohammad Raheel Kamal, Qualcomm Combating Counterfeit Devices at ITU/International and Regional Level Thomas Barmueller, Mobile & Wireless Forum
QRFH Feed in a Perspective of SKA Prof. Jian Yang, Chalmers University of Technology, Sweden Spanish Contribution to the SKA Project: Mid-Frequency Band Array Prof. Magdalena Salazar-Palma, Carlos III University of Madrid, Spain 14:20 – 15:20 Radio Astronomy I Coffee Break 15:20 – 15:40	Demand Prof. Nikolay I. Zheludev, Southampton University, UK 14:10 – 15:50 Wave Propagation and Scattering I Coffee Break 15:50 – 16:10	Coffee Break 14:50 – 15:10	Smartphone Sector Carolina Arias Burgos, EUIPO The Challenges and Concerns posed by Counterfeit Devices Michael Milligan, Mobile & Wireless Forum Addressing the Illegal Device Ecosystem Mohammad Raheel Kamal, Qualcomm Combating Counterfeit Devices at ITU/International and Regional Level Thomas Barmueller, Mobile & Wireless Forum Coffee Break 15:40 – 16:00
QRFH Feed in a Perspective of SKA Prof. Jian Yang, Chalmers University of Technology, Sweden Spanish Contribution to the SKA Project: Mid-Frequency Band Array Prof. Magdalena Salazar-Palma, Carlos III University of Madrid, Spain 14:20 – 15:20 Radio Astronomy I Coffee Break 15:20 – 15:40 15:40 – 17:00	Demand Prof. Nikolay I. Zheludev, Southampton University, UK 14:10 – 15:50 Wave Propagation and Scattering I Coffee Break 15:50 – 16:10 16:10 – 17:50	Coffee Break 14:50 – 15:10 15:10 – 16:50	Smartphone Sector Carolina Arias Burgos, EUIPO The Challenges and Concerns posed by Counterfeit Devices Michael Milligan, Mobile & Wireless Forum Addressing the Illegal Device Ecosystem Mohammad Raheel Kamal, Qualcomm Combating Counterfeit Devices at ITU/International and Regional Level Thomas Barmueller, Mobile & Wireless Forum Coffee Break 15:40 – 16:00 Awards Ceremony

Monday 25/09/17
08:00 – 09:00 Registration
09:00 − 09:30 Opening Ceremony 09:30 − 10:00 Coffee Break
10:00 – 12:00 Workshop: SKA Africa Human Capacity Building - Chair: Prof. Vikass Monebhurrun 1. Manualla Faustian and Flacture respirators (Fau 450). Vana Cha Chan (Invited)
1. Maxwell's Equations and Electromagnetics after 150+ Years, Prof. Weng Cho Chew (Invited)
2. Calculation of Far-Field Radiation Pattern Using Nonuniformly Spaced Antennas by a Least Square Method, Prof. Tapan K. Sarkar (Invited)
3. Low-Frequency Radio Astronomy Engineering in Western Australia, Dr. Adrian Sutinjo (Invited)
12:00 – 13:00 LUNCH
13:00 – 14:20 Workshop: SKA Africa Human Capacity Building - Chair: Prof. Vikass Monebhurrun
1. The State-of-the-Art Research on UWB Eleven Feed and QRFH Feed in a Perspective of SKA, Prof. Jian Yang (Invited)
2. Spanish Contribution to the SKA Project: Mid-Frequency Band Array, Prof. Magdalena Salazar-Palma (Invited)
14:20 – 15:20 Radio Astronomy I - Chair: Prof. Jian Yang 1. A Flovible Multi-Frequency Channel Correlator Ungrade For MUSER LArray Feel Liv. Vibus Yan, Wei Lang, and Liviio Chan
1. A Flexible Multi-Frequency Channel Correlator Upgrade For MUSER-I Array, <u>Fei Liu</u> , Yihua Yan, Wei Lang, and Linjie Chen
 A New IPS Telescope Concept, Yihua Yan, Wei Wang, Linjie Chen, Fei Liu, Lihong Geng, and Zhijun Chen ALMA Band 2+ (67-95 GHz) Receiver Optics, Alvaro Gonzalez, Keiko Kaneko, Shin'inchiro Asayama, Sivasankaran Srikanth, John Effland, and Kamaljeet Saini
15:20 – 15:40 Coffee Break
15:40 – 17:00 Radio Astronomy II - Chair: Prof. Satish Sharma
1. Building an Efficient Linear-Array Imagar Prototype, Ramesh Balasubramanyam, Swaroop Jois, and Ashwini Prakash
2. Detection of Solar Disk and Sky Brightness for Interferometric Imaging, Ying Mei, Feng Wang, Wei Wang, and Yihua Yan 2. Masking Language for Badis France and Interferometric Imaging of Palasiantian Clause Masking Language and Bruss A. Bassatt.
3. Machine Learning for Radio Frequency Interference Mitigation using Polarization, <u>Olorato Mosiane</u> , Nadeem Oozeer, and Bruce A. Bassett
4. Electromagnetic Modelling of the 32-m Ghana Radio Telescope, <u>Mariet Venter</u> , and Pietro Boli
Tuesday 26/09/17
08:30 – 09:10 Plenary Talk
Design and Development of Some Novel Phased Arrays and Anti-Jamming Antennas, Prof. Satish Sharma (invited)
09:10 – 10:30 Radio Astronomy III - Chair: Prof. Zhongxiang Shen
1. Global VLBI in the SKA Era, Arpad Szomoru
2. Development of Mid-Frequency Aperture Arrays for Radio Astronomy, Wim Van Cappellen, Arnold Van Ardenne and R. Millenaar
3. On Mingantu Spectral Radioheliograph-MUSER: Introduction and Observations, Yihua Yan, Zhijun Chen, Wei Wang, Fei Liu, Lihong Geng, and Linjie Chen
4. Simulations of a Radio Interferometer, Dragos Matei, and Alina Badescu
10:30 – 10:50 Coffee Break
10:50 – 11:30 Plenary Talk
Antenna Design: Early History, Basic Considerations and Recent Developments, Prof. Zhongxiang Shen (Invited)
11:30 – 12:30 Antenna Design - Chair: Dr. Gideon Wiid
1. Design of a Folded Split Ring Resonator Antenna for Use in an Animal-Borne Sensor, Samuel Dodson, Gideon Wiid, and Thomas Niesler
2. A Dual-Band Antenna for Unmanned Aerial Vehicle Applications, Weihua Tan, and Zhongxiang Shen
3. Analysis of L-Probe Proximity Fad Patch Antenna With Parasitic Patch, Libor Slama, Josef Dobes, Thomas Bostik, and Frantisek Vejrazka
12:30 – 13:30 LUNCH
13:30 – 14:10 Plenary Talk
Metamaterials: Optical Properties on Demand, Prof. Nikolay I. Zheludev (Invited)
ivietamateriais. Opticai rroperties on Demanu, rroi. Ivikolay i. Zheludev (invited)

14:10 – 15:50 Wave Propagation and Scattering I - Chair: Prof. Guoan Bi

- 1. Measurements of Ultra-Wideband Propagation within a Small Aircraft for Replacing Wire Harnesses. Miyuki Hirose, and Takehiko Kobayashi
- 2. On the Statistical Distribution of Clear Air Effects and the Implication on Microwave Radio Communication Links in Nigeria, Olalekan Lawrence Ojo, and Joseph Sunday Ojo
- 3. Integrating Over Sea Radio Channel for Sea Turtles Localization in Indian Ocean, Loïc Guegan, Nour Mohammad Murad, Jean Mickael Lebreton, and Sylvain Bonhommeau
- 4. Two-Probe Method for Advanced EM Wave Propagation Analysis, Maryna Nesterova, Stuart Nicol, and Yuliya Nesterova
- 5. Communication in Road Tunnels : Predicted Performances of LTE Precoding Techniques, Pierre Laly, Concepcion Sanchis-Borras, Marine Lienard, Jose Maria Molina-Garcia-Pardo, and Pierre Degauque

15:50 - 16:10 Coffee Break

16:10 - 17:50 Wave Propagation and Scattering II - Chair: Prof. Pierre Degauque

- 1.Estimation of Specific Attenuation of Radio Signal in Southwest Nigeria, T.A Adagunodo, S.A. Akinwumi, T.V. Omotosho, and M.L. Akinyemi
- 2. Dominant Path Model Fitted to Signal Measurements of Digital TV in Non-Line of Sight Propagation, Geoflly L. Adonias, and Joabson N. Carvalho
- 3. Forward Velocity Extraction from UAV Spotlight SAR Data, Lei Yang, Song Zhou, Lifan Zhao, and Guoan Bi
- 4. Freezing Height Level Distribution over Durban, South Africa for Satellite Communication, Elijah Olurotimi, Oludare Sokoya, Joseph Ojo, and Pius Owolawi
- 5. Impact of Magnetic Activity on Occurrence of Ionospheric Amplitude Scintillation over Lagos, Nigeria, O.O. Afolabi, T.A. Adagunodo, T.T. Ayorinde, A.B. Rabiu, S.A. Akinwumi, and M.R. Usikalu

Wednesday 27/09/17

08:30 - 09:10 Plenary Talk

Leaky-Wave Antennas: From Niche Applications to Mass Market, Prof. Karu Esselle (Invited)

9:10 - 10:30 Couplers, Waveguides and Resonators I - Chair: Prof. Karu Esselle

- 1. Periodic Leaky-Wave Antenna Based on Multilayer Rectangular Waveguide, Renat Abdullin, and Rostislav Sokolov
- 2. A Tunable Ka-Band Planar Groove Gap Waveguide Resonant Cavity, Titus Oyedokun, Riana Geschke, and Titus Stander
- 3. Effect of Hollow Centre Post in Coupled Combline Resonators, Thato M. Pholele, Joseph M. Chuma, and Ibo Ngebane
- 4. Impact of Different Surface Finishes on Insertion Loss for Microstrip Resonators up to 110 GHz, Olivier Huber, Gottfried Magerl, and Holger Arthaber

10:30 - 10:50 Coffee Break

10:50 - 12:30 Couplers, Waveguides and Resonators II - Chair: Prof. Pavel Belov

- 1. Resonator Designs for Wireless Power Transfer Systems, Mingzhao Song, Polina Kapitanova, and Pavel Belov
- 2. Miniature Band-Pass Filter on Microstrip Resonators, Letavin Denis A., Hau Vu Xuan, and Hung Luu Quang
- 3. A Novel Frequency Pattern Enhancement Technique Based on Capacitively Coupled Microstrip Line Feed, Seyi Stephen Olokede, and Babu Sena Paul
- 4. Miniaturization of Microstrip Directional Coupler by Means of Artificial Transmission Lines, Letavin Denis A., and Hung Luu Quang
- 5. A Triple-Band Microstrip Passive Device Based on Quasi Hybrid-Ring Coupler Feeding, Seyi Stephen Olokede, and Babu Sena Paul

12:30 - 13:30 LUNCH

13:30 - 14:50 Wireless Communication Systems - Chair: Prof. Nour Murad

- 1. Performance Analysis of Concatenated LDPC Codes for Video Broadcast Satellite System, Akanksha Gupta, Anjana Jain, and P. D. Vyavahare
- 2. Novel RSSI-Based Techniques for Indoor Localization, Jinze Du, Jean-François Diouris, and Yide Wang
- 3. Phase-Locked Radar Impulse Optimal Receiver by Average Risk Minimum Criterion. Denis Dolmatov, Renat Abdullin, and Rostislav Sokolov
- 4. Compacting Look-Up-Table Models for All-Digital RF-Transmitters, Norbert Leder, Bernher Pichler, Thomas Faseth, Gottfried Magerl, and Holger Arthaber

14:50 - 15:10 Coffee Break

15:10 - 16:50 Devices and Circuits - Chair: Dr. Shailendra Oree

- 1. Fault Detection of Electrical Equipment by Rapid Calculation of the Magnetic Field from Single and Double-Circuit Twisted Three-Phase Cables, Alessandro Tacchini, Giovanni Mazzanti, Leonardo Sandrolini, Marco Landini, and Effrosyni Kandia
- 2. Volterra Kernels Extraction from Frequency-Domain Data for Weakly Non-Linear Circuit Time-Domain Simulation, Thong Nguyen, Jose Schutt-Aine, and Ying Chen
- 3. Experimental Study on Load Dependent X-Parameter Models for PA Design, Bernhard Pichler, Norbert Leder, Gottfried Magerl, and Holger Arthaber
- 4. Rectenna Design for RF Energy Harvesting using CMOS 350nm and FDSOI 28nm, Edouard Rochefeuille, Frédéric Alicalapa, Alexandre Douyère, and Tan Phu Vuong
- 5. Identification of Line Current Spectra in DC-to-DC Converters with Input Rectification, Amoldus S. de Beer

18:30 - 23:00 Gala Dinner

Thursday 28/09/17

09:00 - 10:00 Computational Electromagnetics - Chair: Prof. Georges Uslenghi

- 1. Exact Scattering by an Elliptical Ribbon Inside a Dihedral Reflector, Pierglorgio L. E. Usienghi
- 2. An Arbitrary Oriented Thin Wire TLM Model with Optimized Interaction Domain, David Saintier, Grégory Kabalane, Marylène Cueille, and Jean-Lou Dubard
- 3. Microwave Complex Permittivity of Hot Compressed Water in Equilibrium with its Vapour, Shailendra Oree, and Roddy Michel Lollchund

10:00 - 10:20 Coffee Break

10:20 - 11:50 Biological Effects and Medical Applications of EMF - Chair: Dr. Nadeem Oozeer

- 1. Effect of Generated Radiofrequency Electromagnetic Field to Heart Rate Variability in Student, Jakub Misek, Jan Jakus, Viera Jakusova, Marcel Veternik, Mirosiav Kohan, and Jan Barabas
- 2. Full Body Imaging with Multiview Electromagnetic Scanners, Jaime Laviada, Yuri Alvarez, Fernando Las-Heras, Borja Gonzalez-Valides, and Ana Arboleya-Arboleya
- 3. The Analysis of High Frequency Plate Applicator for Deep Hyperthermia Cancer Treatment by Using Dielectric Heating, Thanaset Thosdeekoraphat, Samran Santalunai, Kompisit Krajaipote, and Chanchai Thongsopa
- 4. Numerical and Experimental Investigations of the Specific Absorption Rate using Reference Dipoles, Mayank Agarwal, and Vikass Monebhurrun

12:00 - 13:00 LUNCH

13:00 – 15:40 Workshop: The Financial and Technical Implications of Counterfeit Devices - Chair: Mr. Thomas Barmueller

- 1. The Economic Cost of IPR infringement in the Smartphone Sector, Carolina Arias Burgos, European Union Intellectual Property Office
- 2. The Challenges and Concerns posed by Counterfeit Devices, Michael Milligan, Mobile & Wireless Forum
- 3. Addressing the Illegal Device Ecosystem, Mohammad Raheel Kamal, Qualcomm
- 4. Combating Counterfeit Devices at ITU/International and Regional Level, Thomas Barmueller, Mobile & Wireless Forum

15:40 - 16:00 Coffee Break

16:30 -16:50 Awards Ceremony

16:50 - 17:00 Closing Ceremony