



**National School of Applied Sciences – Fez**  
**In collaboration with**  
**Faculty of Sciences and Technologies - Fez**  
**& Renewable Energies & Smart Systems Laboratory**  
**Organize:**

# The International Conference on **W**ireless **T**echnologies embedded and intelligent **S**ystems



## **Conference Program of WITS-2015**

**29-30, April 2015**

**Site of the conference: Faculty of Sciences and Technologies - Fez**



DAY	HOUR	AMPHITEATRE	SALLE	HALL
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**Wednesday, 29 April 2015**

08h30-10h00	Reception and registration of participants			
10h00-10h30	official opening of the conference			
10h30-11h00	Coffee Break			
11h00-11h45	Plenary Session Pr : NOUVEL FABIENNE			
11h45-12h30	Plenary Session Pr : RUICHEK YASSINE			
12h30-14h30	Lunch			
14h30-15h15	Plenary Session Pr : HAFID HAFFAF			
15h15-15h30	Coffee Break			
15h30-18h30	Oral Session ANT : Antenna & CEM		Oral Session SIG : Image and Signal Processing	

**Thursday, 30 Avril 2015**

08h00-08h30	reception and registration of participants			POSTERS
08h30-09h15	Plenary Session Pr : MOHAMMED RAMDANI			P
09h15-09h30	Coffee Break			
09h30-12h30	ORAL SESSION MES: Microelectronics & embedded systems		ORAL SESSION COD : Information coding and transmission	
12h30-14h30	Lunch			
14h30-15h15	Plenary Session Industriel			
15h15-15h30	Coffee Break			
15h30-18h30	ORAL SESSION CS: Computer Science		ORAL SESSION MET: Networking	

<b>Horary</b>	<b>Wednesday, 29 April 2015</b>
<b>8h30-9h30</b>	<b>Reception and registration of participants</b>
<b>9h30-10h00</b>	<b>Official opening of the conference WITS-2015</b>
<b>10h00-10h30</b>	<b>Coffee Break</b>
<b>10h30-11h15</b>	<b>Plenary Session</b> <b>(Amphitheater)</b> <b>Président : A. AHAILOUF &amp; A. EZZOUHAIRI</b>
	<b>Pr : FABIENNE NOUVEL</b> « Les communications dans les systèmes embarqués, notamment inter-véhicules, intra. Quelles sont les solutions pour une meilleure connectivité? »
<b>11h15-12h00</b>	<b>Plenary Session</b> <b>(Amphitheater)</b> <b>President : A. MECHAQRANE &amp; A. MANSOURI</b>
	<b>Pr : YASSINE RUICHEK</b> « Détection et évaluation de situations potentiellement dangereuses dans un environnement de passage à niveau »

<b>12h00-14h00</b>	<b>Lunch</b>
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<b>14h00-14h45</b>	<b>Plenary Session</b> <b>(Amphitheater)</b> <b>President : M. EL MOHAJIR &amp; Y. LAKHRISSE</b>
	<b>Pr : NABIL HAFFAF</b> «Vehicular Network Infrastructure »
<b>14h45-15h00</b>	<b>Coffee Break</b>

<b>15h00-18h00</b>	<b>Oral Sessions</b>
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**ORAL SESSION ANT : ANTENNAS & CEM**

**Wednesday, 29 April 2015, 15h00 to 18h00**

**Presidents : M. JORIO & A. EZZOUHAIRI**

Amphitheater	
ANT-1	« Bowtie unit cell for reflectarray antenna» <b>WASSILA MOULESSEHOUL AND S.M MERIAH.</b>
ANT -2	« Miniaturized Design of Passive Ultra-High Frequency RadioFrequency Identification Tag » <b>MOHAMED TAOUZARI, AHMED MOUHSEN, JAMAL EL AOUI, OTMAN EL MRABET AND HANANE NASRAOUL.</b>
ANT -3	« Wide-Band Cylindrical Dielectric Resonator Antenna for Mobile Communications Systems» <b>ALLABOUCHE KAOUTAR, EL AMRANI EL IDRISSE NAJIBA, JORIO MOHAMED AND MAZRI TOMADER.</b>
ANT -4	« A Tri-band Microstrip patch antenna with Cantor Set Fractal slots for LTE and RFID applications» <b>ABDELKEBIR EL AMRI, ABDELATI REHA, OTHMANE BENHMAMMOUCH, MOHAMED SAIH AND AHMED OULAD SAID.</b>
ANT -5	« Blindage en films de ferrites composites et/ou en cuivre réduisant les émissions parasites en champ proche d'un micro-ruban» <b>KHALID ASSALAOU, LAHOSSINE BOUHOUCHE AND ETIENNE SICARD.</b>
ANT -6	« Energy efficiency of a smart antenna of several dipoles» <b>HANAOU MOHAMED, RIFI MOUNIR AND BOUASSAM HAMID</b>
ANT -7	« Impact of Antennas and Correlated Propagation Channel on BD Capacity Gain for 802.11ac Multi-User MIMO in Home Networks» <b>KHOULOUDE ISSIALI, VALERY GUILLET, GHAIS EL ZEIN AND GHEORGHE ZAHARIA.</b>
ANT -8	« DOUBLE RIDGE WAVEGUIDE BIDIRECTIONAL COUPLER USING AG AND MEF METHODS.» <b>BOUSALAH FAYZA AND BOUKLI-HACENE NOUREDDINE.</b>
ANT-9	« The behavior of a CPW-Fed microstrip hexagonal patch antenna with H-Tree Fractal slots» <b>ABDELATI REHA, MOHAMED SAIH, OTHMANE BENHMAMMOUCH, ABDELKEBIR EL AMRI AND AHMED OULAD SAID</b>
ANT-10	« A New Ultra Wideband Circular Patch Antenna for wireless communication » <b>SOUFIAN LAKRIT AND HASSAN AMMOR.</b>
ANT-11	« Optimisation des Performances de Rayonnement d'une Nouvelle Structure d'Antenne Patch de Forme Carrée pour un Lecteur RFID» <b>ALI EL ALAMI, SAAD DOSSE BENNANI AND ABDEL TIF SLIMANI</b>
ANT-12	« Contribution to the Optimization of the Radiation Performance of Patch Array Antenna for WiMAX Applications» <b>ABDELLATIF SLIMANI, SAAD BENNANI DOSSE, ALI EL ALAMI AND HOUDA HARKAT.</b>
ANT-13	« Etude, Conception et Simulation d'un Commutateur pour la Commande de Pointage d'un Système Antennaire reconfigurable» <b>TOMADER MAZRI, FATIMA RIOUCHE AND NAJIBA EL AMRANI EL IDRISSE</b>
ANT-14	« The behavior of CPW-Fed microstrip patch antenna with KOCH SNOWFLAKE Fractal Slots» <b>ABDELATI REHA, MOHAMED SAIH AND MAROUANE BOUCHOIRBAT</b>

**ORAL SESSION SIG : Image and Signal Processing**

**Wednesday, 29 April 2015, 15h35 to 18h35**

**Presidents : N. ES-SBAI & F. ERRAHIMI**

Salle : 1

SIG -1	« Time-Frequency Analysis of GPR Signal Using a Modified Hilbert Huang Approach» <b>HOUDA HARKAT, SAAD BENNANI DOSSE AND ABDELLATIF SLIMANI</b>
SIG -2	« GLOBAL PARAMETRIC TRANSFORMATION MODELS APPLIED TO MOSAIC IMAGES: A COMPARATIVE STUDY» <b>ABDERRAHMANE LARAQUI, ABDERRAHIM SAAIDI, ABDERRAHMANE JERRAR AND KHALID SATORI.</b>
SIG -3	« Principe du Géoradar et simulation de son fonctionnement par le logiciel Reflexw » <b>GAMIL ALSHARAHL.</b>
SIG -4	« MISE AU POINT D'UN ALGORITHME NUMERIQUE DE TATOUAGE D'IMAGE APRES COMPRESSION UTILISANT UNE ANALYSE MULTIRESOLUTION» <b>KHADIJA SAFI AND ABDELMAJID BADRI.</b>
SIG -5	« Planar method for camera self-calibration having variable focal length» <b>EL BATTEOUI ISMAIL, ABDERRAHIM SAAIDI AND KHALID SATORI.</b>
SIG -6	« New structural approach for numeral recognition based on mathematical morphology and Freeman code » <b>SOUKAINA BENCHAOU, M'BAREK NASRI AND OUAFAE EL MELHAOUI.</b>
SIG -7	« Partial Overlapping Block using Exact Legendre Moment Computation» <b>BAHAOUI ZAINEB, EL FADILI HAKIM, ZENKOUAR KHALID AND QJIDAA HASSAN</b>
SIG -8	«Skeletonization of Noisy and Gray Level Handwritten Characters using Exact Legendre Moments» <b>KHALID ZENKOUAR, HAKIM EL FADILI AND HASSAN QJIDAA</b>
SIG -9	« The Technique of Interleaving Applied on the Transmission of Noisy Images Using a Turbo-Code» <b>MENEZLA FAYSSAL, MELIANI RACHIDA AND MAHDJOUR ZOUBIR</b>
SIG -10	« Contribution à l'indexation des documents manuscrits arabes scannés» <b>YOUSSEF ELFAKIR, GHIZLANE KHAISSIDI, MOSTAFA MRABTI AND DRISS CHENOUNI</b>

Horary	Thursday, 30 Avril 2015
08h00-08h30	Reception and registration of participants
08h30-9h15	Plenary Session (Amphitheater) Président : R. OUREMCHI & A. EZZOUHAIRI
9h15-9h30	Pr : Mohammed RAMDANI «L'immunité des circuits intégrés au-delà de 1 GHz» Coffee Break
9h30-12h30	Oral Sessions

**ORAL SESSION COD : Information coding and transmission**

**Thursday, 30 April 2015, 09h30 à 12h30**

**Presidents : F. ABDI & G. KHAISSIDI**

Salle : 1

COD -1	« Improvement of MIMO MC-CDMA Receiver Using the CORDIC Algorithm » <b>YOUNESS MEHDAOUI, MOSTAFA MRABTI, RACHID EL ALAMI AND ADIL EL MAKRANI</b>
COD -2	« Field Coupling to Shielded Cable due to a Plane a Wave using BLT Equation » <b>MOHAMED SAIH, ABDELATI REHA, ROUIJAA HICHAM AND ABDELLILAH GHAMMAZ.</b>
COD -3	« Fibre microstructurée à grande dispersion négative accordable dans la bande C» <b>OUADAH MOHAMMED CHEMSS EDDINE.</b>
COD -4	« FFT windows offset correction for OFDM receiver» <b>THOMAS LARHZAOU, FABIENNE NOUVEL AND JEAN-YVES BAUDAIS</b>
COD -5	« Etude comparative entre les codes optiques d'un système DS-OCDMA incohérent » <b>BOUREGAA MOUWEFTEQ, CHIKH-BLED MOHAMMED AND IKHLEF ABDELLAH.</b>
COD -6	« Intelligent Receiver for M-OAM IR-UWB Modulations System » <b>LAMYAE MAATOUGUI, YASSIN EL HILLALI, ATIKA RIVENQ, ABDELOWAHED HAJJAJI AND HASSAN OUAHMANE.</b>
COD-7	«A Novel Attack and Throughput-Aware Routing and Wavelength Assignment Algorithm in Transparent Optical Networks » <b>KENZA GAIZI, FOUAD MOHAMMED ABBOU AND FARID ABDI</b>

**ORAL SESSION MES: Microelectronics & embedded systems**

**Thursday, 30 April 2015, 09h30 à 12h30**

**Presidents :A. AHAITOUF & A. MANSOURI**

Amphitheater

MES -1	« An ARM-based Microkernel on Reconfigurable Zynq-7000 Platform » <b>TIAN XIA, JEAN-CHRISTOPHE PRÉVOTET AND FABIENNE NOUVEL.</b>
MES -2	« Study Of The Behaviour Of Wind Turbines Using Dubly Feed Asynchronous Generator During Voltage Dip » <b>ABDELAZIZ MOUAHID, ABDELLATIF KHAMLICH AND ABDALLAH SAAD.</b>
MES -3	« Optimized FPGA Architecture of Driver VGA to display image RGB» <b>KHALID MATEUR, RACHID EL GOURI, LÂAMARI HLOU, ABDELKADER MEZOUARI AND MOHAMMED ALAREQL.</b>
MES -4	« Dynamic Power Estimation of FPGA-based Wireless Communication Systems » <b>JORDANE LORANDEL, JEAN-CHRISTOPHE PREVOTET AND MARYLINE HELARD.</b>
MES -5	« Analysis and Design of Microstrip Lowpass Filter with an Extended Stopband Performance Using New Shaped Defected Ground Structure (DGS)» <b>CHAIMAA BEGHADID.</b>
MES -6	« On the ways of the HEVC/H265 standard » <b>EL BDOURI ABDELALI, MANSOURI ANASS AND AHAITOUF ALI.</b>

MES -7	« Design and Implementation of Wireless Zigbee Sensor Based On Embedded 32-Bits FPGA Processor» <b>GAGA AHMED, ERRAHIMI FATIMA, ES-SBAI NAJIA AND DIOURI OMAR.</b>
MES -8	« A Comparision of Haar-like Features and Local Binary Patters for Face Detection in an Embedded System» <b>SOUHAIL GUENNOUNI, ANASS MANSOURI AND ALI AHAITOUF</b>
MES -9	« A New Approach for Humanoid Robots Based on Upper Level Ontology to Arrange New Objects)» <b>ABDERRAHMANE KHIAT AND MOUSSA BENAISSA.</b>
MES -10	« Transient Analysis of Nanometer Circuits Using FDTD Technique » <b>SATAR MOULOUD AND BELAHRACH HASSAN.</b>
MES -11	« Mise en oeuvre d'un prototype didactique d'un électrostimulateur musculaire » <b>NAJET TELMOUDI.</b>
MES -12	« Facial expression recognition on Android» <b>GRECHE LATIFA, HAMAOUI NABIL AND ES-SBAI NAJIA.</b>
MES -13	«Analysis of HEVC Video ENcoder Using ARM Cortex –A8 with NEON Technology» <b>ABDESSAMAD EL ANSARI, ANASS MANSOURI AND ALI AHAITOUF</b>
MES -14	«Conception d'un Comparateur Phase-Fréquence pour les PLLs de haute Performance» <b>ZOUAQ KARIM, ALAMI MUSTAPHA AND BOUYAHYAOUI ABDELMALIK</b>

<b>12h30-14h30</b>	<b>Lunch</b>
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<b>14h30-15h15</b>	Plenary Session (Amphitheater) <b>Presidents : M. AMECHAQRANE &amp; A. MANSOURI</b>
	« ..... » <b>Industriel</b>

<b>15h15-15h30</b>	<b>Coffee Break</b>
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<b>15h30-18h30</b>	<b>Oral Sessions</b>
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**ORAL SESSION NET: Networking**

**Thursday, 30 April 2015, 15h30 to 18h30**

**Presidents : M. MRABTI & H. EL FADILI**

Salle : 1

NET -1	« Adaptive video streaming based-user control using TCP parameters » <b>YASSINE DOUGA AND MALIKA BOURENANE</b>
NET -2	« Optimizing Latency in DTN Networks with Model BLER » <b>ABDELLAOUI ALAOUI EL ARBI, AGOUJIL SAID AND HAJAR MOHA</b>
NET -3	«Study and evaluation of the high availability of a Dynamic Multipoint Virtual Private Network» <b>AYOUB BAHNASSE AND NAJIB EL KAMOUN.</b>
NET -4	« Optimization of AODV routing protocol in mobile ad-hoc network by introducing features of the protocol LBAR » <b>GUIDOUM AMINA AND AOUED BOUKELIF</b>
NET -5	« Efficient Clustering based Routing for Mobile Underwater Wireless Sensor Networks » <b>IHEM SOUKI, MOURAD HADJILA AND MOHAMMED FEHAM</b>
NET -6	« Distributed SDN Control Plane: Design and Evaluation » <b>SAFAE ZERRIK, MOHAMED BAKHOUYA AND DRISS EL OUADGHIRI</b>

**ORAL SESSION CS: Computer Science**

**Thursday, 30 April 2015, 15h30 to 18h30**

**Presidents : A. LACHKAR & A. KENZI**

Amphitheater

Open Source Software Development link to Green Information Systems and Technologies  
**PR: NASSER JAMALKHAN COP, MBA, M.BPS, M.IoEE, PM.IAOP, FGMN, FHEA**  
**FORMER CIO OF OPEN SOURCE DEVELOPMENT LTD (UK). EMAIL : [OPENSDD1@GMAIL.COM](mailto:OPENSDD1@GMAIL.COM)**

CS -1	« Algorithmes d'ordonancement des tâches dans un environnement Cloud» <b>ZOUHEYR BOUAFIA, BADR BENMAMMAR AND MOURAD HAKEM</b>
CS -2	« Distributed System based on Cloud Computing with Wireless Sensor Networks» <b>CHRISTOPHE ISHIMWE NGABO AND OMAR EL BEQQALI</b>
CS -3	« Conformity Behavior of Dissimilar Methods for Object Oriented Constraint Programming» <b>KHADIJA LOUZAOU AND KHALID BENLHACHMI</b>
CS -4	« A New Collaborative Risk Assessment Model for Cloud Computing» <b>SAADIA DRISSI, SIHAM BENHADOU AND HICHAM MEDROMI</b>
CS -5	« A Comparative Study of Composition Model Methods and Techniques» <b>NISRINE EL MARZOUKI, YOUNES LAKHRISSI AND MOHAMMED EL MOHAJIR.</b>
CS -6	« A Framework of Information Service Platform in E-Government» <b>EL BENANY MOHAMED MAHMOUD AND OMAR EL BEQQALI</b>
CS -7	« A best-choice game with incomplete information» <b>VLADIMIR MAZALOV AND ELENA KONOVALCHIKOVA</b>
CS -8	« An approach for the Development of adaptable Services-oriented Systems» <b>ISSAM ELMAGROUNI, ADIL KENZLI, MOHAMMED LETHRECH AND ABDELAZIZ KRIOULE</b>



POSTER SESSION

Thursday, 30 April 2015, 15h35 to 18h35

President : Y. LAKHRISSE

Hall

P -1	« ANALYSIS OF DIPOLE ANTENNAS USING MOMENT METHODS AND POINT MATCHING» BAYJJA MOHAMED, BOUSSOUS MOHAMED AND AMAR TOUHAMI NAIMA
P -2	« Etude et implémentation des codes LDPC pour la technologie WIMAX IEEE 802.16» MAHI SARRA, ABDELHAFID BOUACHA AND FETHI TARIK BENDEMRED
P -3	« Intégration d'un service de localisation GSM/GPS» BELDJILALI BILAL AND BENADDA BELKACEM
P -4	« Synthèse sur les techniques de détection de spectre dans les réseaux de radio cognitive» IMANE SELADJI AND BADR BENMAMMAR
P -5	« Comparative study between two topologies of five levels inverters for photovoltaic applications» OMAR DIOURI, AHMED GAGA, NAJIA ES-SBAI AND FATIMA ERRAHIMI
P -6	« Healthcare Cloud-Sensor Survey» AHMED KHALID YASSINE SETTOUTI, MOEZ ESSEGHIR, LEILA MERGHEM-BOULAHIA AND FEDOUA DIDI
P -7	« The State-of-the-Art in Visual People Tracking» KHADIJA LAAROSSI, ABDERRAHIM SAAIDI, MOHAMED MASRAR AND KHALID SATORI
P -8	« Model of matching on the fuzzy preferences» BAHRI MOUNIR
P -9	« WISE-MNet experimental wireless sensor network simulator for multimedia content» M.BENNANI MOHAMED TAJ MOHAMED TAJ AND MOHAMD AIT KBIR AIT KBIR
P -10	« Maximum Power Point Tracking using Fuzzy logic Controller of a Fly-back converter for photovoltaic applications» YOUSSEF CHEDDADI, FATIMA ERRAHIMI AND NAJIA ES-SBAI
P -11	« Supervision industrielle basée sur les réseaux sans fil» MOHAMMED BAKKARI AND ABDELLAH KHATORY
P -12	« Signal strength localization mechanism in Wireless Sensor Networks» MOHAMED MBIDA AND ABDELLAH EZZATI
P -13	« Antenna slotted dual-band patch with ferrite» FATIMA ZAHRA HANIN AND LARBI SETTI
P -14	« Intelligent System designed for Unmanned Air Vehicles based on multi-agent systems» FIRDAOUS MARZOUK AND HICHAM MEDROMI
P -15	« FPGA Based Image Processing Algorithms Using Xilinx System Generator» MOHAMMED ALAREQI, KHALID MATEUR, RACHID EL GOURI AND LÂAMARI HLOU