POSTER SESSIONS

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P. Cheng
Envelope amplifier based on multiphase buck converter with MTC for high bandwidth application
J.A. Moreno
DC/DC buck converter serial-parallel linear-assisted for RF envelope tracking
D. Tena
High efficiency EER transmitter
J. Torres
Adaptive Digital Predistorter for EER Power Amplifiers

CONTROL TECHNIQUES
Y. Bouvier
45kW Full Bridge Converter with Discontinuous Primary Current for High Efficiency Airborne Application
Y. Bouvier & U. Borović
Comparison of 10kW Isolated Rectifier for Aircraft Application
A. Rodríguez*
Control Strategy of a Three-Port Power Electronic System Using a Parallel Connection of a PFC Boost and a Dual Active Bridge
S. Zhao
Design of Energy Control Method for Three-Phase Buck-Type Rectifier with Very Demanding Load Steps

MODELING, SIMULATION AND OPTIMIZATION OF POWER CIRCUITS
J. Cortés
Analysis and comparison of ripple-based control techniques
J. Cortés
Optimization of integrated racetrack inductors for PowerSoc
D. Cučak
Physical modeling and Optimization of GaN HEMTs for HF applications
F.A. Holguín
Simplified capacitive model for center-tapped multi-windings transformers
D. Martel
Improvements on the design process of magnetic components using PExprt
A. Espino & J. Martínez
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V. Šviković
Optimization and Analysis of PowerSoc Buck Converter with integrated passives for Automotive Application

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J.M. Fernández
Redundancy And Protection System for the Cold Superconducting Magnets at XFEL
A. Francés
High-current and low-voltage step-down converter to supply cold superconducting magnets
D. González & M. Arias*
Conceiving a New Type of AC/DC HB-LED Driver for Retrofit Lamps Based on a Loss-Free Resistor
J.M. Molina
AB-Rectifier: An Isolated Three Phase Rectifier for Aircraft Applications
M.A. Silva
Isolated Swiss-Forward Rectifier for Aircraft Applications
A. Vázquez*
Inductor Optimization for Multiphase Interleaved Synchronous Bidirectional Boost Converter Working in Discontinuous Conduction Mode with Zero Voltage Switching

RE-CONFIGURABILITY & EVOLVABLE HARDWARE
B. López
Power-aware multiobjective evolvable hardware system on FPGA
J. Mora & Á. Gallego
Opportunities of Dynamic Scalability of Evolvable Hardware Solutions
A. Rodríguez
Use of Dynamic and Partial Reconfiguration in Multikernel Multithread Parallelized Many-Core Accelerator Schemes
J. Valverde
A Bus Architecture for Dynamically Trading-Off Among Performance, Energy Consumption and Dependability in Cyber Physical Systems
F. Veljković
Towards Improved Fault Tolerance by means of Dynamic and Partial Reconfiguration in Space Applications

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A. Bravo
Configurable Power Inverter for Magnetic Hyperthermia
A. Gutiérrez
Inductor Optimization for a Hyperthermia Inverter
J.C. Hidalgo & E. Benavente
Three phase inverter for motor control of an air exchanger
C.A. López
Control Technique to Increase the Efficiency in Wireless Power Transfer Systems
D. Menezes
Multiphase Parallel Interleaved and Primary-Parallel Secondary-Series Forward Micro-Inverter Comparison
M.R. Ramos
Cryonext: Influence of electrical fields on water nucleation
V. Šviković & F. Pascual
Electronic Circuit to Protect a Brushless Synchronous Machine

WIRELESS SENSOR NETWORKS
D. Aledeo
Hardware implementations of Artificial Neural Networks for image encoding
A. Garcia
Android-Based Support Tool for in-field Positioning of Wireless Sensor Nodes
M.V. Maigler
Wireless Optical Sensor for Virus Detection
G.N. Mujica
Design and Development of an Assistant Tool for Deploying, Debugging and Maintaining Wireless Sensor Networks: The DPCM Project
D. Pérez
Self-learning embedded intelligent system based on an architecture of dynamic and adaptive decision tree
E. Quesada & M.V. Maigler
Wireless Sensor Networks for Greening Food Processing
M. Villaverde
Cooperative learning model based on multiagent architecture for embedded intelligence systems
R. Zamacoa
Implementation of an AODV-based routing protocol for Wireless Sensor Networks using an IEEE 802.15.4 communication layer

*UNIVERSIDAD DE OVIEDO
**TECHNICAL SESSIONS**

**Oral Session (I)**

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<th>Session</th>
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<tr>
<td>9:00-11:15</td>
<td>Oral</td>
<td>Physical modeling and Optimization of GaN HEMTs for HF applications</td>
<td>D. Ćučak</td>
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<td>Session</td>
<td>Achieving Higher Efficiency in Industrial Inkjet Printing</td>
<td>E. Boere (APEX Microtechnology)</td>
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<td>Power-aware multiobjective evolvable hardware system on FPGA</td>
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<td>Improvements on the design process of magnetic components using PExprt</td>
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<td>Label-free biosensors based on Biophotonic sensing Cells (BICELLs)</td>
<td>M. Holgado (ETSII-UPM)</td>
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<td>Optimization and Analysis of PwrSoC Buck Converter with integrated passives for Automotive Application</td>
<td>V. Šviković</td>
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**COFFEE BREAK**

**Oral Session (II)**

<table>
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<tr>
<td>11:15-12:00</td>
<td>Oral</td>
<td>Equalization system for battery cells based on the wave-trap concept</td>
<td>M. Arias (Univ. Oviedo)</td>
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<tr>
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<td>Session</td>
<td>45kW Full Bridge Converter with Discontinuous Primary Current for High Efficiency Airborne Application</td>
<td>Y. Bouvier</td>
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<td>Hardware implementations of Artificial Neural Networks for image encoding</td>
<td>D. Aledo</td>
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<td>Adaptive Digital Predistorter for EER Power Amplifiers</td>
<td>D. Tena</td>
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<td>More electric aircraft</td>
<td>L. Segura (AIRBUS)</td>
</tr>
<tr>
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<td></td>
<td>Design and Development of an Assistant Tool for Deploying, Debugging and Maintaining Wireless Sensor Networks: The DPCM Project</td>
<td>G.N. Mujica</td>
</tr>
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At 14:15 h. photo group at the ETSII Main entrance