

2012 ESA Workshop on Aerospace EMC
21-23 May 2012, Venice, Italy

Sunday 20 May 2012	
17:00 – 19:15	Pre-registration
19:45 – 21:00	Visit of the Church of San Marco
Monday 21 May 2012	
08:00	Registration
09:30	Welcome and Opening
Session 1: Management	
09:40	Assessment of AlphaMagnetic Spectrometer (AMS) Upper Experiment Structural Configuration Shielding Effectiveness <i>Scully, R.</i> <i>NASA, (UNITED STATES)</i>
10:00	Extension of the Qualification Range of the Ariane 5 Launcher to the Radiated Electromagnetic Emissions of the Satellites Operating in KA Band <i>Bertrand, A. ; Schaffar, A. ; Gineste, PN.</i> <i>EADS Astrium Space Transportation, (FRANCE)</i>
10:20	EMC Techniques for a complex Project: Karoo Array Telescope <i>Reader, H¹; Van der Merwe, P¹; Otto, A¹; Wiid, G¹; Andriambeloson, J¹; Kibet-Langat, P¹; Kruizinga, B²</i> <i>¹University of Stellenbosch, (SOUTH AFRICA); ²Eindhoven University of Technology, (NETHERLANDS)</i>
10:40	Identifying Electromagnetic Attacks Against Airports <i>Kreth, A.; Genender, E.; Doering, O. ; Garbe, H.</i> <i>Leibniz University Hannover, (GERMANY);</i>
11:00	Coffee Break
Session 2: Statistical Techniques	
11:30	Statistical Variation of Coupling Inside a Cabinet Loaded with Printed Circuit Boards <i>Thomas, D ; Paul, J D ; Christopoulos, C</i> <i>The University of Nottingham, (UNITED KINGDOM)</i>
11:50	Impact of Dielectric Variability on Modal Signaling Over Cable Bundles <i>Manfredi, P. ; Canavero, F. G.</i> <i>Politecnico di Torino, (ITALY)</i>
12:10	Enforcing experimentally Stochastic Techniques in uncertain Electromagnetic Environments <i>Bonnet, P.; Girard, S.; Lallechere, S.; Paladian, F.</i> <i>Clermont University, (FRANCE)</i>
12:30	Probability Distribution of the Quality Factor of Spacecraft Structures Modelled as Undermoded Reverberation Chambers <i>Gradoni, G. ¹; Arnaut, L. ²</i> <i>¹University of Maryland, (UNITED STATES); ²Imperial College of Science, Technology, and Medicine, (UNITED KINGDOM)</i>
13:00	Lunch Break
Session 3: Modelling I	
14:10	Kron's Method Applied to the Study of Electromagnetic Interference Occurring in Aerospace Systems <i>Leman, S. ¹; Reineix, A. ²; Mahmoudi, M. ¹; Hoeppe, F. ¹; Demoulin, B. ³; Ustuner, F. ⁴; Puig, J.M. ⁵</i> <i>¹NEXIO, (FRANCE); ²Xlim, (FRANCE); ³TELICE, (FRANCE); ⁴TUBITAK, (TURKEY); ⁵APPLUS, (SPAIN)</i>
14:30	Evaluation of radiated Transfer Functions of a Fuselage Model in an Anechoic and in a reverberating Radio Frequency Environment <i>Rasek, G. A. ¹; Loos, S. E. ¹; Neubauer, M. ¹; Junqua, I. ²; Schröder, A. ³; Pascual, E. ⁴</i> <i>¹EMCCons DR. RAŠEK GmbH & Co. KG, (GERMANY); ²ONERA, (FRANCE); ³Technische Universität Hamburg-Harburg, (GERMANY); ⁴EADS-CASA, (SPAIN)</i>

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14:50	Assessment of Wireless Link Budget in a Satellite by Modelling Techniques <i>Gineste, P-N.¹; Herlem, Y.¹; Outey, A.²; Pelissou, P.³</i> ¹ ASTRIUM SPACE TRANSPORTATION, (FRANCE); ² SERMA ENGINEERING, (FRANCE); ³ ASTRIUM SATELLITES, (FRANCE)
15:10	Equivalent Cable Bundle Model For Large Cable Response In Complex Vehicle Environment <i>Ridel, M. ; Parmantier, J-P.</i> <i>The french aerospace lab, (FRANCE)</i>
15:30	Coffee Break
Session 4: Poster Session on measurements, Modelling and Magnetic Cleanliness	
	Determination of the Magnetic Moment with Spherical Measurements and Spherical Harmonics Modelling <i>Dumond, O.¹; Berge, R.²</i> ¹ CNES, (FRANCE); ² INTESPACE, (FRANCE)
	CM2 Spacecraft magnetic Test Facility <i>Qi, Q.</i> <i>Chinese Academy of Space Technology, (CHINA)</i>
	Induction Equipment for measuring of magnetic Moments of moving Objects <i>Afanassiev, Y.</i> <i>State Unitary Enterprise «D.I.Mendelev VNIIM», St.-Petersburg, (RUSSIAN FEDERATION)</i>
	New Facility to support S/C Magnetic Cleanliness Program <i>Polirpo, A.</i> <i>Thales Alenia Space Italy, (ITALY)</i>
	Removing Strong Solar Array Disturbances and Telemetry Errors from DC Magnetic Field Measurements with a Dual Fluxgate Technique <i>Laakso, H. ; Klos, T.</i> <i>ESA/ESTEC, (NETHERLANDS)</i>
	Particle Swarm Optimization to solve Multiple Dipole Modelling Problems in Space Applications <i>Carrubba, E.¹; Junge, A.²; Monorchio, A.³</i> ¹ Kayser Italia, (ITALY); ² ESA-ESTEC, (NETHERLANDS); ³ Dept. of Inf. Eng. Univ. of Pisa, (ITALY)
	Stirrer Shape Investigation inside a Reverberating Chamber <i>Quenem, W. ; Issac, F.</i> <i>ONERA, (FRANCE)</i>
	Analog Fibre-Optical Link with Ultra-Small, Optically Powered Transmit Module <i>Mann, W.¹; Petermann, K.²</i> ¹ enprobe GmbH, (GERMANY); ² University of Technology, Berlin, (GERMANY)
	EMC Measurements From The Instrument ASPOC Aboard Magnetospheric Multiscale (MMS) Mission <i>Eichelberger, H. U. ; Prattes, G. ; Fremuth, G. ; Giner, F. ; Jeszenszky, H. ; Kürbisch, Ch. ; Leichtfried, M. ; Torkar, K.</i> <i>Space Research Institute, Austrian Academy of Sciences, (AUSTRIA)</i>
	Global Monitoring of the Electromagnetic Parameters of Space Weather in the Frame of the ISS Infrastructure <i>Klimov, S. ; Petrukovich, A. ; Zelenyi, L.</i> <i>Space Research Institute of the RAS, (RUSSIAN FEDERATION)</i>
	Verification Approaches For Equipment Radiated Susceptibility On Satellite Scenarios <i>Scione, E. ; Daprati, G. ; Antongirolami, D.</i> <i>Thales Alenia Space Italia S.p.a, (ITALY)</i>
	Power Line Communications for Spacecrafts <i>Geneste, X. ; Wolf, J. ; Geneste, X.</i> <i>ESA/ESTEC, (NETHERLANDS)</i>
	High-Frequency Coupling to Cables for Plane Wave and Reverberation Room Conditions <i>Pissoort, D.¹; Vanhee, F.¹; Boesman, B.¹; Catrysse, J.¹; Vandenbosch, G.²; Gielen, G.²</i> ¹ KHBO, (BELGIUM); ² K.U. Leuven, (BELGIUM)
	Em Modelling of RF Propagation Through Plasma Plumes <i>Pandolfo, L.¹; Bandinelli, M.¹; Quijano, J.L.A.²; Pawlak, H.³; Marliani, F.⁴</i> ¹ IDS Ingegneria Dei Sistemi S.p.A., (ITALY); ² Universidad Nacional de Colombia, (COLOMBIA); ³ OHB System AG, (GERMANY); ⁴ ESA ESTEC, (NETHERLANDS)

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Cable Crosstalk Analysis and Simulation: A Comparison Between Low Frequency Circuit Approach and Transmission Line Theory Mora, N. ¹ ; Rachidi, F. ¹ ; Pelissou, P. ² ; Junge, A. ³ ¹ EPFL, (SWITZERLAND); ² EADS Astrium SAS, (FRANCE); ³ ESA, (NETHERLANDS)	
Evaluation of internal Electromagnetic Fields for SGEO Satellite at 12GHZ Guida, Giancarlo ¹ ; Marley, Derek ² ; Marra, Sergio ³ ; Martorelli, Valerio ⁴ ¹ Ingegneria dei Sistemi Spa, (ITALY); ² OHB, (GERMANY); ³ ESA, (NETHERLANDS); ⁴ IDS, (ITALY)	
Systema-GTD / INCA Soriano, T. ¹ ; Pelissou, P. ¹ ; Laget, P. ² ¹ Astrium Satellites, (FRANCE); ² ESA, (NETHERLANDS)	
Efficient Computer Simulation of EMC Problems by Time Domain Algorithms Weiland, T. ; Munteanu, Irina Technische Universitaet Darmstadt, (GERMANY);	
Comparison of Time and Frequency Domain Methods for indirect Lightning Effect Computation: a Case Study Anatzki, Juergen ; Gronwald, Frank Hamburg University of Technology, (GERMANY)	
Terminal Units for the Experimental Assessment of Bundles of Twisted-Wire Pairs Exposed to External Radiation Grassi, F. ¹ ; Ghislanzoni, L. ² ; Grassi, F. ¹ ; Marliani, F. ³ ; Pignari, S. A. ¹ ; Spadacini, G. ¹ ¹ Politecnico di Milano, (ITALY); ² C-Sigma s.r.l., (ITALY); ³ ESA-ESTEC, (NETHERLANDS)	
An advanced conducted Noise Tool for System Analysis Pelissou, P. ¹ ; Delannoy, P. ¹ ; Romeuf, X. ² ; Laget, P. ³ ¹ Astrium Satellites, (FRANCE); ² AxesSim, (FRANCE); ³ ESA, (NETHERLANDS)	
Integration of an OCT Based Modelling Tool in to an Electromagnetic Simulator Framework.Experimental Validation Guida, Giancarlo ; Bandinelli, Mauro; Galgani, Giovanni ; Martorelli, Valerio ; Sarri, Antonio Ingegneria dei Sistemi SpA, (ITALY);	
Low RF Reflectivity Spacecraft Thermal Blanket by Uusing High-Impedance Surface Absorbers Costa, F. ¹ ; Monorchio, A. ¹ ; Carrubba, E. ² ¹ University of Pisa, (ITALY); ² Kayser Italia, (ITALY)	
19:00	Cocktail Dinner

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Tuesday 22 May 2012		
08:30	Registration	
	Session 5: Aviation and Avionics	Session 5a: Magnetic Cleanliness
09:00	Modeling of large avionic Structures in electrical Network Simulations <i>Piche, A. ¹; Perraud, R. ¹; Lochot, C. ²</i> ¹ EADS Innovation Works, (FRANCE); ² Airbus, (FRANCE)	In-Flight scientific Performance of Magnetically clean Spacecraft :Ulysses and Cluster <i>Balogh, A ; Balogh, Andre</i> <i>Imperial College London, (UNITED KINGDOM)</i>
09:20	EM Immunity Study of Serial Links <i>Fontana, M. ¹; Rigazio, L. ¹; Canavero, F. G. ¹; Perraud, R. ²</i> ¹ Politecnico di Torino, (ITALY); ² EADS Innovation Works, (FRANCE)	Selected Spacecraft Magnetic Cleanliness Problems and their Solutions <i>Musmann, G.</i> <i>TU Braunschweig,formerly, (GERMANY)</i>
09:40	In-Flight Lightning Measurements and Reconstruction on a Metallic and Composite Aircraft <i>Boissin, JF ¹; Flourens, F. ¹; Perez, G. ²; DeBoer, A. ³</i> ¹ Airbus Operations SAS, (FRANCE); ² EADS IW, (FRANCE); ³ NLR, (NETHERLANDS)	Magnetic Properties of Champ and their Effects on in-flight Calibration <i>Lühr, H. ¹; Yin, F. ²; Bock, R. ³</i> ¹ Deutsches GeoForschungszentrum, GFZ, (GERMANY); ² Wuhan University, (CHINA); ³ ESA/ESTEC, (NETHERLANDS)
10:00	A 3d Model To Compute Lightning And HIRF Coupling Effects On Avionic Equipment Of An Aircraft <i>Perrin, E. ¹; Tristant, F. ²; Guiffaut, C. ³; Terrade, F. ²; Reineix, A. ³</i> ¹ CISTEME, (FRANCE); ² Dassault Aviation, (FRANCE); ³ XLIM, (FRANCE)	'Clean' Observations of Magnetic Field Fluctuations on Planetary Surfaces <i>Schwingschuh, K. ²; Prattes, G. ²; Delva, M. ²; Eichelberger, H. U. ²; Berghofer, G. ²; Magnes, W. ²; Vellante, M. ³; Nenovski, P. ⁴; Wesztergom, V. ⁵</i> ² Institut für Weltraumforschung, Österreichische Akademie der Wissenschaften, (AUSTRIA); ³ Dipartimento di Fisica, Università dell'Aquila, (ITALY); ⁴ Geophysical Institute, Sofia, (BULGARIA); ⁵ Geodetic and Geophysical Research Institute of the Hungarian Academy of Science, (HUNGARY)
10:20	Conformity with the HIRF Environment Applied to Avionic System <i>Tristant, F. ; Rotteleur, J.P. ; Moreau, J.P.</i> <i>Dassault-Aviation Company, (FRANCE)</i>	Venus Express dual Magnetometry and Data Cleaning <i>Delva, M. ¹; Zhang, T.L. ¹; Pope, S.A. ²; Dimmock, A.P. ²</i> ¹ Space Research Institute Graz, (AUSTRIA); ² University of Sheffield, (UNITED KINGDOM)
10:40	Coffee Break	
	Session 6: EMI Effects	Session 6a: Magnetic Cleanliness
11:10	Power, Signal Integrity, and Single Event Effects Design Principles for FPGA <i>Perez, R.</i> <i>Jet Propulsion Laboratory, (UNITED STATES)</i>	New Developments in Magnetostatic Cleanliness Modeling <i>Mehlem, K ¹; Wiegand, A ²; Weikert, S ²</i> ¹ ESA, (GERMANY); ² Astos Solution GmbH, (GERMANY)
11:30	Experimental Results of Plasma Induced EMI Effects in a Reflector Antenna System <i>Pawlak, H. ¹; Bandinelli, M ²; Pandolfo, L ²; Sarri, A ²; Fittipaldi, D.A. ²; Marliani, F ³</i> ¹ OHB System AG, (GERMANY); ² IDS Ingegneria Dei Sistemi S.p.A, (ITALY); ³ ESA/ESTEC, (NETHERLANDS)	Spacecraft Magnetic Cleanliness Prediction and Control <i>Weikert, S. ; Mehlem, K. ; Wiegand, A.</i> <i>Astos Solutions GmbH, (GERMANY)</i>
11:50	Radiated Emission of Breath Monitoring System based on UWB Pulses in Spacecraft Modules <i>Russo, P. ; Mariani Primiani, V. ; De Leo, A. ; Cerri, G.</i> <i>Universita' Politecnica delle marche, (ITALY)</i>	Multiple magnetic Dipole Modeling coupled with a genetic Algorithm <i>Lientschnig, G.</i> <i>Vienna, (AUSTRIA)</i>
12:10	High Speed Link Radiated Emission <i>Bisognin, P.B ¹; Pelissou, Patrice/ P.P ¹; Vargas, Olivier/</i>	Application of Finite Element Methods to the Analysis of Magnetic Contamination around Electronics in

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	<i>O.V.¹; Laget, Philippe/ P.L.²</i> <i>¹Astrium SAS, (FRANCE); ²ESA-ESTEC, (NETHERLANDS)</i>	Magnetic Sensor Devices <i>Diaz Michelena, M.¹; Maicas, M.²</i> <i>¹INTA, (SPAIN); ²ISOM - UPM, (SPAIN)</i>
12:30	Carbon Nanostructures for Electromagnetic Shielding and Lightning Strike Protection Applications in Aircraft <i>Shah, T; Jones, M; Alberding, M</i> <i>Applied NanoStructured Solutions, (UNITED STATES)</i>	Montecarlo approach for Magnetic Cleanliness Evaluation on Spacecraft <i>Boschetti, D. ; Marziali, I. ; Gervasio, G.</i> <i>Thales Alenia Space Italia, (ITALY)</i>
13:00	Lunch Break	
	Session 7: Modelling II	Session 7a: Magnetic Cleanliness
14:10	A Full-wave Solution Strategy for Computing Antenna Couplings on a Mockup Fighter Aircraft at Ku Band <i>Lee, J. F. ; Wang, X. ; Peng, Z.</i> <i>The Ohio State University, (UNITED STATES)</i>	Qualification of the Magnetic Field Simulation Facility MFSa for Satellites with large Dimensions <i>Kuegler, H.</i> <i>IABG, (GERMANY)</i>
14:30	Electrostatic Cleanliness on Solar Orbiter and its Effect on Plasma Measurements <i>Cully, C.¹; Cully, C.M.¹; Eriksson, A.I.¹; Genot, V.²; Guillemant, S.²; Pantellini, F.³; Maksimovic, M.³; Mateo-Velez, J.-C.⁴</i> <i>¹Swedish Institute of Space Physics, (SWEDEN); ²Institut de Recherche en Astrophysique et Planetologie, (FRANCE); ³Observatoire de Paris, (FRANCE); ⁴ONERA, (FRANCE)</i>	Verification of DC Magnetic Model Predictions at Spececraft Level <i>Junge, A. ; Marliani, F.</i> <i>ESA-ESTEC, (NETHERLANDS)</i>
14:50	An accurate Method to compute the Parasitic Electromagnetic Radiations of real Solar Panels <i>Andrieu, G¹; Panh, J²; Reineix, A³; Pelissou, P⁴; Girard, C⁵; Delannoy, P⁴; Romeuf, X⁵; Schmitt, D⁶</i> <i>¹XLIM Laboratory, (FRANCE); ²CNES, (FRANCE); ³XLIM, (FRANCE); ⁴EADS ASTRIUM, (FRANCE); ⁵AXESSIM, (FRANCE); ⁶ESA, (FRANCE)</i>	The Swarm Absolute Scalar Magnetometer magnetic cleanliness Program <i>Leger, JM¹; Alcouffe, F¹; Bertrand, F¹; Jager, T¹; Le Prado, M¹; Fratter, I²</i> <i>¹CEA-Leti, Minatec, (FRANCE); ²CNES, (FRANCE)</i>
15:10	Conducted EMI Modeling and Mitigation for Power Converters and Motor Drives <i>Sun, J.</i> <i>Rensselaer Polytechnic Institute, (UNITED STATES)</i>	Differential Fluxgate Magnetometer for a Survey Estimate of a Dipole Magnetic Moment of Space Vehicles <i>Afanassiev, Y.</i> <i>State Unitary Enterprise «D.I.Mendeleev VNIIM», St.-Petersburg, (RUSSIAN FEDERATION)</i>
15:30	Coffee Break	
	Session 8: Poster Session on Aircraft Industry, EMI Effects and Management	Session 8a: Magnetic Cleanliness
	Measurement of Wideband FM-CW-Radar Characteristics during approach of Aircrafts <i>Kuellmer, A. ; Schueuer, J. ; Enders, A. ; Spieker, H.</i> <i>University of Braunschweig, (GERMANY)</i>	16:00 Impact of Data Period on Magnetometer Zero Offset Determination <i>Pudney, M.A.¹; Carr, C.M.¹; Schwartz, S.J.¹; Howarth, S.I.²</i> <i>¹Imperial College London, (UNITED KINGDOM); ²Astrium Ltd, (UNITED KINGDOM)</i>
	Interference Analysis Process in Military Aircraft Industry <i>Rothenhäusler, M.</i> <i>CASSIDIAN, (GERMANY)</i>	16:20 Maintaining Gradiometer Cleanliness On-Orbit <i>Chu, D¹; Chastain, C²; Westbury, D²; Todirita, M³; Farthing, H⁴; Chu, D¹</i> <i>¹Chesapeake Aerospace LLC, (UNITED STATES); ²Lockheed-Martin, (UNITED STATES); ³NOAA, (UNITED STATES); ⁴Orbital Sciences Corporation, (UNITED STATES)</i>
	Advanced grounding Methods in the Presence of CFRP Structures	16:40 Design and Calibration of a Compact Low-Noise Magnetic Gradiometer

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<p>Leininger, Michael¹; Thurecht, Frank¹; Pfeiffer, Ernst² ¹Kayser-Threde, (GERMANY); ²High Performance Structure Systems, (GERMANY)</p>		<p>Griffin, D.¹; Hall, M.²; Trougnou, L.³; Hewitson, M.⁴; Howe, C.¹; Leopoldi, M.⁵; Ding, L.⁵; Turner, S.²; Harmon, S.² ¹RAL, (UNITED KINGDOM); ²NPL, (UNITED KINGDOM); ³ESA, (NETHERLANDS); ⁴MPG, (GERMANY); ⁵Bartington Instruments, (UNITED KINGDOM)</p>
<p>Electromagnetic Shielding by Composite Nanostructured Materials Davide Micheli, Micheli.D.¹; Susanna Laurenzi, S. Laurenzi¹; Valter Mariani Primiani, V. Mariani Primiani²; Franco Moglie, F. Moglie²; Gabriele Gradoni, G. Gradoni³; Mario Marchetti, M. Marchetti¹ ¹Sapienza Univeristy of Rome, (ITALY); ²Università Politecnica delle Marche, (ITALY); ³University of Maryland, (UNITED STATES)</p>	<p>17:00</p>	<p>Magnetic Environment and Magnetic Field Standards at NPL for the Calibration of Low Noise Magnetometers and Gradiometers for Cleanliness Studies. Hall, M ; Harmon, S ; Turner, S National Physical Laboratory, (UNITED KINGDOM)</p>
<p>Voltage Stress on Y-Capacitors form Indirect Lightning Pulses According to ED-14/DO-160 Meier, F. Apparatebau Gauting, (GERMANY)</p>		
<p>Spacewire/LVDS Signal Lines: Investigation on Emissions Ilario, M.¹; Boschetti, D.¹; Gervasio, G.¹; Genovese, E.² ¹Thales Alenia Space Italia, (ITALY); ²CST, (GERMANY)</p>		
<p>Electromagnetic Study of the Power and Radio Boards of a Student Cubesat Jarrix, S.¹; Blain, A.²; Doridant, A.²; Raoult, J.²; Pouant, C.³ ¹Institut d Electronique du Sud, (FRANCE); ²l'institut d Electronique du Sud, (FRANCE); ³Université Montpellier 2, (FRANCE)</p>		
<p>Electrical and EMC Safety Implications of Experiments on-board the International Space Station Perkins, C ESA ESTEC, (NETHERLANDS)</p>		
<p>ECSS Space Systems Electromagnetic Compatibility Handbook Trougnou, L. ESA-ESTEC, (NETHERLANDS)</p>		
<p>Radiated EMC Analyses Participation to Telecommunication Satellite Cost Reduction Blondeaux, Henri Thales Alenia Space, (FRANCE)</p>		
<p>16:00</p>	<p>Seminar from CST</p>	
<p>19:00</p>	<p>Social Event</p>	

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Wednesday 23 May 2012	
08:30	Registration
Session 9: Aircraft Industry	
09:00	Compensation of unavailable Test Frequencies during Immunity Measurements <i>Stadtler, Thimo²; Gronwald, Frank¹; Kebel, Robert²</i> ¹ Hamburg University of Technology, (GERMANY); ² Airbus Operation GmbH, Hamburg, (GERMANY)
09:20	Lightning Modelling : From 3D to Circuit Approach. <i>Moussa, H.¹; Abdi, M.¹; Issac, F.²; Prost, D.²</i> ¹ SAFRAN POWER - HISPANO-SUIZA, (FRANCE); ² ONERA, (FRANCE)
09:40	Determination of the Path Loss from Passenger electronic Devices to Radio Altimeter with additional EMI Test <i>Schüür, J.¹; Nunes, R. R.²</i> ¹ TU Braunschweig, (GERMANY); ² German Aerospace Center (DLR), (GERMANY)
10:00	Assessment of Lightning Transients on a de-iced Rotor Blade with predictive Tools and coaxial Return Measurements <i>Guillet, S.¹; Gosmain, A.¹; Ducoux, W.¹; Ponçon, M.¹; Fontaine, G.²; Perraud, R.³</i> ¹ Eurocopter, (FRANCE); ² DGA TA, (FRANCE); ³ EADS IW, (FRANCE)
10:20	NEMP Qualification of electrically simple Equipment on CFC Aircraft via Analysis <i>Ockerse, J; Flessa, C</i> <i>Eurocopter, (GERMANY)</i>
10:40	Coffee Break
Session 10: Measurements	
11:10	In-flight Lightning Damage Assessment System ILDAS: Tests on-Ground and in-Flight. <i>van Deursen, A.</i> <i>Eindhoven University of Technology, (NETHERLANDS)</i>
11:30	Application of a new EMC Test Method for Space Unit Qualification in cold Operational Condition-Radiated Susceptibility Tests in Thermal Vacuum on GAIA Payload <i>Lescoat, Frédéric ; Pelissou, Patrice ; Rougier, Gilles ; Trougnou, Laurent</i> <i>EADS Astrium, (FRANCE)</i>
11:50	New Approach of RE/RS global Tests at Payload Level <i>Terral, M. ; Pourtau, JC.</i> <i>Thales Alenia Space, (FRANCE)</i>
12:10	Time-Reversal Electromagnetic Chamber <i>Monsef, F. ; Cozza, A.</i> <i>Laboratoire des Signaux et Systèmes - Supélec, (FRANCE)</i>
12:30	An Alternative Way of Measuring the SE of Shielding Materials <i>Festa, D.¹; Pocali, M.²; Dotto, I.³; Festa, D.¹</i> ¹ IBD International Business Development Sas, (ITALY); ² EMC Consultant, (ITALY); ³ CISAM, (ITALY)
13:00	Lunch Break
Session 11: Power Line Communication	
14:10	Application of Power Line Communication (PLC) in Space - current Status and Outlook <i>Wolf, J.</i> <i>ESA ESTEC, (NETHERLANDS)</i>
14:30	Predicted Performances Of Power Line Communication in Aircraft <i>Degauque, P.¹; Degardin, V.¹; Junqua, I.²; Lienard, M.¹; Bertuol, S.²; Genoulaz, J.³; Dunand, M.³</i> ¹ University of Lille/IEMN, (FRANCE); ² ONERA, (FRANCE); ³ SAFRAN Eng. Service, (FRANCE)
14:50	Achieving EMC Emissions Compliance for an Aeronautics Powerline Communications System <i>Dominiak, S.¹; Vos, Guus²; ter Meer, Theo²; Widmer, Hanspeter¹</i> ¹ Lucerne University of Applied Sciences & Arts, (SWITZERLAND); ² National Aerospace Laboratory, (NETHERLANDS)

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15:10	Selection of Coupling Circuits for Powerline Communications Onboard Spacecraft <i>Grassi, F. ¹; Pignari, S. A. ¹; Wolf, J. ²</i> <i>¹Politecnico di Milano, (ITALY); ²ESA-ESTEC, (NETHERLANDS)</i>
15:30	<i>Coffee Break</i>
Session 12: Statistical Techniques	
16:00	Reliability of Goodness-of-Fit Tests for statistical Compliancy of Electromagnetic Field in a Reverberation Chamber <i>Monsef, F. ; Cozza, A.</i> <i>Laboratoire des Signaux et Systèmes - Supelec, (FRANCE)</i>
16:20	Optimization of immunity testings in a mode tuned reverberation chamber with Monte Carlo simulations <i>Lemoine, C. ; Amador, E. ; Besnier, P.</i> <i>IETR, (FRANCE)</i>
16:40	Measurement of the Stochastic Electromagnetic Field Coupling into Transmission Lines in a Reverberation Chamber <i>Magdowski, M ; Siddiqui, S ; Vick, R</i> <i>Otto-von-Guericke University, (GERMANY)</i>