<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
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<tbody>
<tr>
<td><strong>Tuesday feb. 3rd</strong></td>
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<tr>
<td>13.00 – 14.00</td>
<td>Registration</td>
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<tr>
<td>14.00 – 14.40</td>
<td>Opening</td>
<td>Institutions &amp; organizers</td>
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<tr>
<td>14.40 – 15.40</td>
<td>Keynotes 1 &amp; 2</td>
<td>Airbus &amp; other authors to be confirmed</td>
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<tr>
<td>15.40 – 16.00</td>
<td>Coffee break</td>
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<tr>
<td>16.00 – 17.50</td>
<td>Oral session 1</td>
<td>Architectures trends for more electric aircraft</td>
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<tr>
<td>18.30 – 19.30</td>
<td>Welcome party</td>
<td>Capitole (City Hall) – Salle des Illustres</td>
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<tr>
<td><strong>Wednesday feb. 4th</strong></td>
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<tr>
<td>8.10 – 9.10</td>
<td>Keynotes 3 &amp; 4</td>
<td>Safran &amp; Rolls-Royce authors to be confirmed</td>
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<tr>
<td>9.10 – 11.00</td>
<td>Oral session 2</td>
<td>The more/all electric engine</td>
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<tr>
<td>11.00 – 11.20</td>
<td>Coffee break</td>
<td>Industrial exhibition</td>
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<tr>
<td>11.20 – 12.40</td>
<td>Poster session 1</td>
<td>Architectures &amp; Technologies</td>
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<tr>
<td>12.40 – 14.00</td>
<td>Buffet lunch</td>
<td>Industrial exhibition</td>
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<tr>
<td>14.00 – 15.50</td>
<td>Oral session 3</td>
<td>Inserting new technologies into programmes</td>
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<tr>
<td>15.50 – 16.10</td>
<td>Coffee break</td>
<td>Industrial exhibition</td>
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<tr>
<td>16.10 – 17.30</td>
<td>Poster session 2</td>
<td>Energy management</td>
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<tr>
<td>20.00 – 23.00</td>
<td>Gala dinner</td>
<td>Mercure Hotel (next to conference center)</td>
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<td><strong>Thursday feb. 5th</strong></td>
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<tr>
<td>8.00 - 10.20</td>
<td>Oral session 4</td>
<td>Fuel cell developments for aircraft (with FDFC2015)</td>
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<tr>
<td>10.20 – 10.50</td>
<td>coffee break</td>
<td>Industrial exhibition</td>
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<tr>
<td>10.50 – 12.40</td>
<td>Oral session 5</td>
<td>Advances in technologies &amp; products</td>
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<tr>
<td>12.40 – 14.00</td>
<td>Buffet lunch</td>
<td>Industrial exhibition</td>
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<tr>
<td>14.00 – 15.20</td>
<td>Poster session 3</td>
<td>Actuators &amp; Components</td>
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<tr>
<td>15.20 - 15.40</td>
<td>Coffee break</td>
<td>Industrial exhibition</td>
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<tr>
<td>15.40 – 17.10</td>
<td>Round tables</td>
<td>MEA technologies maturity and seamless product insertion</td>
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<td>Bridging the gap: linking industry to academia</td>
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Detailed programme

**Oral session O1 – Tuesday pm - Architecture Trends for More Electric Aircraft**

O1-1 More Electric Aircraft: a status on Cleansky breakthroughs
Jacques Faucher, Etienne Foch, Airbus

O1-2 The Bombardier More Electric Aircraft Project
Antonio Ricciardi, Bombardier Aerospace

O1-3 Toward a More Electric Falcon business Jet
Bernard Baldini, Dassault Aviation

O1-4 Airline point of view about MRO for MEA (TBC)
Sven Biller, Lufthansa Technik

O1-5 Certification of Electrical System
Jerome Bruel, EASA

**Oral session O2 – Wednesday am – The more/all Electric Engine**

O2-1 Integration of Electrical Machines into the Engine: Routemap of Technology Options & Opportunities
Philip McGoldrick, Safran LPS

O2-2 Aircraft Starter-Generator System based on Permanent-Magnet Machine fed by Active Front-End Rectifier
Serhiy Bozhko et al., University of Nottingham

O2-3 State of the art of Helicopter Hybrid Propulsion
Christian Mercier et al., Airbus Helicopters

O2-4 Full electrical E-Fan aircraft for general aviation: Project Overview and main perspectives. Innovations and challenges
Emmanuel Joubert et al., Airbus Group

O2-5 Distributed Electrical Aerospace Propulsion
Mark Husband et al., Rolls-Royce
Poster Session P1 – Wednesday am - Architectures & technologies

Trends for architectures & technologies

P1-1 Electrification and Intellectualization. The Two Main Aircraft Power Systems Evolution Trends
Zybin E.Yu et al., GosNIIAS

P1-2 A Hybrid System for Ice Protection and Detection
Tobias Strobl et al., Airbus Group Innovation

P1-3 Safety & Energy Efficiency Research on Advanced More Electrical Flight Control Actuation Systems for Short/Middle Range Passenger Aircraft
V. Kuvshinov et al., TsaGi

P1-4 Towards More Optimization for Aircraft Energy Conversion Systems
Alain Tardy et al., Virginia Tech

P1-5 The Impact of Additive Manufacturing on the Development of Electrical Machines for MEA Applications: A Feasibility Study
Michele Garibaldi et al., University of Nottingham

P1-6 Integration of Novel Aerospace Technologies : The INNOVATE Project
Constanza Ahumada et al., University of Nottingham

P1-7 An overview of two UAV projects developed within the INNOVATE program
Sarah Roggia et al., University of Nottingham

P1-8 Sawtooth pattern to reduce fuel consumption of hybrid planes
Hadrien Bourjot et al., SMA

P1-9 Study of Hybrid Electric Propulsion for a Radical Aircraft Concept
G. Barraud et al., Airbus

P1-10 Electric Distributed Propulsion for Small Business Aircraft : A Concept-Plane
Jean Hermetz et al., Onera

P1-11 A Concept Plane using electric distributed propulsion - Evaluation of advanced power architecture
Michaël Ridel et al., Onera

P1-12 A Collaborative Optimization Strategy for the Design of More Electric Aircraft Networks
Djamel Hadbi et al., Laplace

P1-13 Design and development of a hybrid NACA 4412 morphing airfoil
Johannes Scheller et al., Laplace

P1-14 Advancements in Hydraulic Systems for the More Electric Aircraft
Jeff Skinner et al., Eaton
Integration of MEA equipment, EMC and thermal issues

P1-15 Methodology for predicting degradation shape and depth of a CFRP during short-circuit current injection
Jean Rivenc et al., Airbus Group Innovation

P1-16 Ground Return Fluctuation management in More Electric Rotorcraft
Marc Meyer et al., Airbus Helicopters

P1-17 A Global Optimization Approach Integrating Low Frequency Switching Harmonics Standard for Electric Actuators Design in Aircraft Electrical Networks: Harmonics/Weight Optimization
Slim Hrigua et al., G2ELab

P1-18 Hardware-in-the-Loop-Testing of Control Units for Dynamic, High-Precision Electric Drives
Andreas Himmler, dSPACE

P1-19 Thermal models of components for preliminary design of more electrical aircraft systems.
Florian Sanchez et al., Institut Clément Ader

P1-20 First-step sizing of high internal temperature machines
Daniel Roger et al., Université de Lille Nord de France

P1-21 MECEP Project - Mastering Conducted Emissions on Power Equipment
Christian Marot et al., Airbus Group Innovation

P1-22 Integrated Modular Power Electronics: Achievements and Challenges
T. Bensalah et al., Thales AES

P1-23 Arc tracking energy balance: application to copper and aluminium aeronautic wires
Th. André et al., Laplace

P1-24 Partial discharge detection in electric apparatus fed by PWM like inverter in aircraft environment: a laboratory study.
Cedric Abadie et al., IRT Saint-Exupéry

P1-25 Technological bricks and predictive tools for power conversion chains
J. Genoulaz et al., LPS Safran Group
Oral session O3 – Wednesday pm - Inserting new technologies into programmes

O3-1 Transferring the Experience and Technology of Electric Mobility into Aircraft
Peter Glöckner et al., FAG Aerospace

O3-2 Electrical Power Generation & Start Solutions for the Falcon 5X Program
François Biais et al., Thales AES

O3-3 APU on More Electrical Aircraft : a vision for the future
Jean-François Rideau et al., Microturbo

O3-4 Integrated Design by Optimization of Power Systems for More Electric Aircraft
Bo Wen et al., Virginia Tech

O3-5 Strategy for COMAC More Electric Aircraft Development
Yuan Li Kang, COMAC

Poster Session P2 – Wednesday pm - Energy management

Power management

P2-1 Advanced Embedded Platforms for Distributed Power Management
Jacques Gatard et al., TTTech

P2-2 Implementation of a firmware for electrical energy management logics and verification in Labview simulation environment
Beniamino Guida et al., Aeromechs

P2-3 DACAPO® – The energy-autonomous cabin
Ronny A. Knepple, Diehl Aerospace

P2-4 High Power Density 45kW SiC Converter Design and Performances
Nicolas Dheilly et al., Labinal Power Systems

Power generation

P2-5 Sliding mode control for aeronautical electrical generators
Alberto Cavallo et al., 2nd. University of Naples

P2-6 Novel Winding Concept for MEA Actuators
Puvan Arumugam et al., University of Nottingham

P2-7 Powerloss Analysis of a Permanent-Magnet Machine Based Starter/Generator Fed by an Active Front-End Rectifier
Tao Yang et al., University of Nottingham

P2-8 Modelling of the High Speed Multi-Pole Synchronous Generator for Application in More Electric Aircraft Power Systems
Michał Michna et al., Gdansk University of Technology
P2-9 Integrative methodologies to improve operation of Starter/Generator system in More Electric Aircraft
Constanza Ahumada et al., University of Nottingham

P2-10 Comparison of multi-physics optimization methods for high speed synchronous reluctance machines
Mauro Di Nardo et al., University of Nottingham

Energy storage

P2-11 Integrated interleaved active balancing converter for battery management applications
Kremena Vladimirova et al., Freemens

P2-12 Super capacitor battery hybridization with high power density bidirectional converter
Michel Jamot, Airbus Helicopters

P2-13 SOC Needs for optimal active or passive Li-ion balancing techniques
Xavier Pichon et al., G2Elab

P2-14 High purity hydrogen generation via catalytic partial dehydrogenation of kerosene Jet A-1
Mélanie Taillades et al., University of Montpellier

Propulsion

P2-15 Simple hybrid propulsion model for hybrid aircraft design space exploration
Mathieu Belleville, Airbus

P2-16 Performance assessment methodology of a commercial aircraft associated with a hybrid propulsion system
Adrien Pertat et al., Snecma

P2-17 Propulsion System Optimisation Approach for Hybrid/Electric Aircraft
Peter Malkin et al., Cranfield University

P2-18 EGTS® – Electric taxi solution
Christophe Devillers, Messier-Bugatti-Dowty

MEA certification

P2-19 Electric taxiing technology – smart solution to decrease negative environmental effect of aircraft
M.Pogosyan et al., JSC United Aircraft Corporation

P2-20 Repercussions from MEA on Electrical Wiring Interconnection Systems
Serge Roques, Safran LPS

P2-21 Sustainment of MEA EWIS
Michael Traskos et al., Lectromec
P2-22 SSPC based Electrical Power Distribution Unit for a Part 23 aircraft
Carlo Cardu et al., Piaggio Aero Industries

P2-23 Technology integration maturity assessment for aircraft development programs
Susan Liscouet-Hanke, Bombardier Aerospace

P2-24 Impact of More Electrical Aircraft on Electrical Wiring Interconnection System
Ludovic Ybanez et al., LPS Safran

P2-25 Reliability of electrical insulation systems (EIS) in power distribution network and conversion chains
Michel Dunand et al., LPS Safran

O4-1 Overview of MEA architectures and key technologies
Etienne Foch, Airbus

O4-2 General state of the art of the fuel cells’ aeronautical applications.
Franck Masset, Zodiac Aerospace

O4-3 Optimized hydrogen fuel cell systems for MOA and all electric propulsion drivetrains
Josef Kallo et al., DLR

O4-4 Fuel Cell system integration for aeronautic applications
T. Horde et al., Snecma DMS

O4-5 Key Drivers for Aeronautic Batteries. Today and Future Aircrafts Electrically Powered
Florence Fusalba et al., CEA

Oral Session 5 – Thursday am – Products & Technologies Advances

O5-1 Advanced Magnetic Technologies for MEA
V.A. Kargopoltev et al., JSC United Aircraft Corporation

O5-2 Methodologies for the optimal design of the Integrated Modular Power Electronics Cabinet
X.Giraud et al., Airbus/Université de Toulouse

O5-3 Latest advances in Electric Primary Flight Control Actuation
Yvan Carlier et al., UTC Aerospace Systems

O5-4 Power Electronics and Control: Key competencies for aircraft electrical systems competitiveness
Sébastien Vieillard, Safran LPS

O5-5 Advanced Power Electronics for Aerospace Applications
Jan Uhlig et al., Liebherr Aerospace

Poster Session P3 – Thursday pm - Actuators & components

Technologies & components

P3-1 Effective Management of MVA-range electric Power in Aircraft enabled by high Tc superconducting systems
Sergey Samoilenkov et al., Superox

P3-2 Study of a superconducting motor with high specific torque
A.Rada et al., University of Lorraine

P3-3 Partial discharges measurements at the constituents’ level of aerospace power electronics converters
Benjamin Cella et al., Liebherr Elektronik
P3-4 Automatic generation of windings for permanent magnet synchronous machines dedicated to embedded systems
D. Jarrot et al., Laplace

P3-5 Multi-objective Optimization dedicated to the design of MEA Equipment
Jérémy Bourdon et al., Laplace/Airbus

P3-6 Pyro Fail Safe SSPC for Fault-Tolerant Converters and Safe HVDC-Power Network
Jose DOMINGO SALVANY et al., Nexter Electronics

P3-7 FilSiC – From the epi layer to the chip
Grégory GROSSET et al., IBS

P3-8 Energy Harvesting for Wireless in Flight Testing on A321 Aircraft
P.Durand Estèbe et al., LAAS

P3-9 Maturing DC Protection Methods for the More-Electric Aircraft
K. Fong et al., University of Strathclyde

P3-10 Local HVDC Network Architectures and Challenges
Benoît MICHAUD, Safran Labinal Power Systems

Actuators

P3-11 Design of embedded electromechanical power hinge mini actuator for electric aircraft concept.
S.L. Samsonovich et al., MAI

P3-12 Distributed and electrically synchronized EMA’s net for a new type of secondary Flight Control System
Jean-Claude DERRIEN et al., Sagem Défense & Sécurité

3-13 On Hinge Rotary Electro Mechanical Actuator development for primary flight control surfaces
Aurore SASSIER, Sagem Défense & Sécurité

3-14 Research of Aircraft Flight Dynamics Peculiarities Due to the Using of Electric Actuators in Control System
V.M. Kuvshinov, Central Aerohydrodynamic Institute

3-15 Design and modeling of the piezoelectric motor based on three resonance actuators
Roland Ryndzionek et al., Gdansk University of Technology

P3-16 Position Control of Direct-Driven Hydraulic Drive without Conventional Oil Tank for More Electric Aircraft
Tatiana Minav et al., Aalto University

P3-17 Investigation of alternative actuator configurations for aerospace applications
K. Anagnostopoulos et al., NTUA

P3-18 Two synchronous permanent magnet machine frameworks for a direct drive active stick application
Jean-Francois Allias et al., Laplace
P3-19 Electromechanical Actuator for Helicopter Landing Gears
M. Rottach et al., Liebherr Aerospace

P3-20 Models for dimensioning hybrid morphing airfoil actuating system
Gurvan Jodin et al., Laplace – IMFT

**MRO, health monitoring**

P3-21 Saliency Tracking-based Condition Monitoring for Electromechanical Actuators
Jesus Arellano-Padilla et al., University of Nottingham

P3-22 An integrated prognostic and condition monitoring strategy for primary flight control electro-mechanical actuators
Thu-Hien Pham et al., DLR

**Cooling concepts**

P3-23 An Energy Efficient and Lightweight On-Board Cooling System using CO2
Johannes et al., Hamburg University of Technology

P3-24 Dynamic management of electrical and thermal power
Kader Benmachou et al., Liebherr Aerospace

**High temperature technology**

P3-25 200°C Operating Temperature Film Capacitors
Mark Donhowe et al., W.L.Gore & Associates

P3-26 Winding wires for high temperature machine
G. Vélu et al., Univ. Lille Nord de France

P3-27 Quantitative power density limits of aerospace permanent magnet synchronous machines
M. van der Geest et al., Delft University of Technology