

4<sup>th</sup> DRAFT



## Preliminary Program eMobility (EMC/EMR/EMF) and MultiPhysics Workshop 2014 (CATRENE/EU/BMBF)

FU US University Foundation - Rue d'Egmont 11 - 1000 Brussels - Belgium  
<http://www.fondationuniversitaire.be/en/>

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### DAY 1 - 20.01.2014

Registration + Welcome Coffee: 08:30 - 09:30

#### Project Overview (Part 1) 09:30/10:10 (40')

- EMsafety (A. Vogl) - 20'
- EM4EM (W. John) - 20'

#### Project Presentations EMsafety (Part 1) - 10:10/12:00 (1h 50')

- EMF Measurement Platform Approach (CEA/LETI/TUB) - 30'
- GMI Sensor Prototype and Magnetic Wire (TAMAG) - 20'
- Sensor Interfaces, Data Processing and Visualization (SINTEF/TUB) - 30'
- Magnetic Fields on Board of Electric Transport Systems in Regard to Human Exposure (UNITO/FIRMS) - 30'

Lunch Break 12:00 - 12:30 (30')

#### Project Presentations EMsafety (Part 2) - 12:30/13:50 (1h 20')

- EMF Mitigation and Optimised Topology by Suitable EV Design (MIRA/CRF/IPM) - 30'
- Cabling design and simulation (PRY/LUH) - 30'
- Possible Contribution to Standardisation Bodies (MIRA/SINTEF) - 20'

Application and  
Exploitation Possibilities of EMsafety Results (ALL) - 13:50/15:30 (1h 40')

**Coffee Break 15:50 - 15:45 (15')**

**Project Presentations EM4EM (Part 1) - 15:45 - 16:45 (60')**

- Analytical Calculation of Intrinsic Shielding Effectiveness for Isotropic and Anisotropic Materials Based on Measured Electrical Parameters (Audi) - 20'
- Design Methodology for IGBT Modules (IFAG) - 20'
- ESD Modelling and Robustness for system Level Design (TUDO/IFAG) - 20'

**Project Presentations EM4EM (Part 2) - 16:45 - 17:45 (60')**

- Suppression of Electromagnetic Interference (Daimler) - 20'
- Advanced PCB Design with EMR Concurrent Analysis (ZUKEN) - 20'

**Wrap-up of Day 1 (W. John) 17:45 -18:00**

**<TBC> Come Together (ALL) - 19:00**

**DAY 2 - 21.01.2014**

**Registration 08:00 - 08:30**

**Project Presentations EM4EM (Part 3) - 08:30 - 09:30 (60')**

- Advanced Probe Design for Multivector Field Measurement (FAU) - 20'
- Broadband Integrated Amplifier Design for Multivector E/H Field Probes (FAU) - 20'
- Distribution of EMI Effects by Block Oriented Modeling of Nonlinear Circuits (LUH) - 20'

**Project Overview (Part 2) 09:30 - 10:10 (40')**

- THOR/Striking Technologies for Power (van Helvoort/Philips) - 20'
- InSel/Intrinsic Noise Reduced Power Electronic (Joerg Thiele/IFAG) - 20'

**Coffee Break/Poster Session 10:10 - 10:25 (15')**

**Application and Exploitation Possibilities of EM4EM and THOR Results (ALL) - 10:10/11:20 (30')**

**SetUp of an EMC/EMR/EMF RoadMap (W. John) 11:20 - 12:00 (20')**

- Next Step for Improved Exploitation

**MultiPhysics Forum (ALL) - 12:00 - 14:15 (2h 15')**

(MultiPhysics in Automotive/Industrial Electronic/Aeronautics Applications => Consideration of coupled physical effects (electro-magnetic + mechanical + thermal + ...) during the whole added value chain)

- Collection of New Project Ideas + Process of identifying relevant future R+D topics (MultiPhysics) and generating project(s) in the frame for Horizon 2020 and/or ECSEL (replacing the previous ENIAC and ARTEMIS JU)