Electrical Drives in Agricultural Machines

TU Dresden and the FJ-BLT Wieselburg have organized four colloquia "Electric Drives in agricultural machines" since 2011 to foster and support the vision of electrification and the interdisciplinary exchange of knowledge.

TU Dresden and FJ-BLT Wieselburg now want to invite you for another colloquium with participation of representatives from industry and academia. The focus is primarily put on **"Systems Architecture and Interfaces"** and it is divided into two parts:

- Status Quo and Expectations on Electrification
- System Components, Current Research, Visions

Partnerships and Sponsors

The media Partner is the "Vereinigte Fachverlage GmbH" Mainz and CLAAS KGaA mbH is the sponsor from the agricultural industry. The VDI Bezirksverein Dresden is the local partner.

Venue

The location for the colloquium is the "Dülfersaal" at the building "Alte Mensa" within the main campus of the university **Mommsenstraße 13, 01069 Dresden,** entrance from Dülferstraße. The diner event takes place in the test barn at the **ZINT campus Bergstraße 120, 01069 Dresden.**

Taxi Service: Funktaxi Dresden + 49 351 211 211
Conference fee: total 180 EUR (no VAT)

Conference language: Presentations are going to be held in *German and English*, while the shared presentation material will be only provided in English. Simultaneous German-English translation is made available if the need is requested on the online registration form.

Organizer

TU Dresden, Chair of Agricultural Systems and Technology,
Prof. Dr.-Ing. Thomas Herlitzius

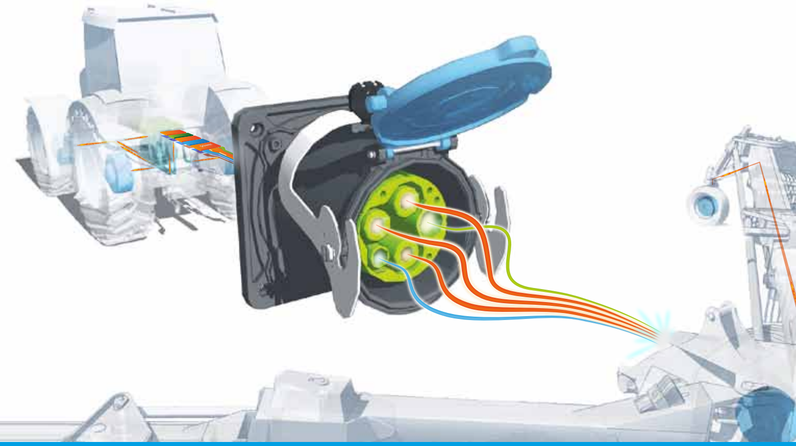
BLT Wieselburg / Ifz Francisco Josephinum, DI Heinrich Prankl

Latest Information

Actual information is provided at:
http://www.agrarsystemtechnik.de/

Electrical Drives in Agricultural Machines

Systems Architecture and Interfaces



01-02 July 2014
Dresden (Germany)

5th International Colloquium

Program Committee and Contributors

Martin Baldinger, Fa. Pöttinger, Grieskirchen, AT • Stefan Böttinger, Universität Hohenheim, DE • Harald Dietel, Fa. Sensor Technik Wiedemann, Kaufbeuren, DE • Thomas Herlitzius, Technische Universität Dresden, DE • Heinrich Prankl, FJ-BLT Wieselburg, AT • Joachim Sobotzik, John Deere EEDSG, ETIC Kaiserslautern, DE • Peter Michael Synek, VDMA, DE

• ***Wolfgang Breu***	AGCO GmbH
• ***Riccardo Morselli***	CNH
• ***Heinrich Prankl***	BLT Wieselburg – Ifz Francisco Josephinum
• ***Sebastian Tetzlaff***	Claas
• ***Friedrich Moertl***	Compact Dynamics GmbH
• ***Patrick Wappler***	Elbflorace e.V.
• ***Reinhold Bals***	IAV GmbH Ingenieurgesellschaft Auto und Verkehr
• ***Joachim Sobotzik***	John Deere EEDSG , ETIC Kaiserslautern
• ***Gernot Steinmair***	Magna Powertrain
• ***Paul van Ham***	Multi Tool Trac BV
• ***Andreas Roth***	Roth Systemtechnik
• ***Jan Schröter***	RWTH Aachen
• ***Thomas Schwarzmüller***	Schwarzmüller Consulting
• ***Harald Dietel***	Sensor Technik Wiedemann GmbH
• ***Thomas Herlitzius***	TU Dresden, Professur für Agrarsystemtechnik
• ***Mike Geißler***	TU Dresden, Professur für Agrarsystemtechnik
• ***Tim Bögel***	TU Dresden, Professur für Agrarsystemtechnik
• ***Michael Synek***	Verband Deutscher Maschinen- und Anlagenbau e.V.

Program

01 July

Tuesday

Current status of electrification in agricultural machines and expectation of future development

12:00 Registration

1:00 pm Welcome Address

• Electrification at AGCO Fendt - Lessons Learned	Wolfgang Breu, AGCO Fendt
• Experience with electrification and electric transmission - Value of "High Voltage"	Riccardo Morselli, CNH
• Electrification – success story in mobile material handling machines	Thomas Schwarzmüller, Schwarzmüller Consulting
• Status report of AEF activities	Harald Dietel, STW
• Podium discussion with the referents	Michael Synek, VDMA

3:20 pm Coffee Break

• Interface for electrified tractor-implement-combinations	Sebastian Tetzlaff, Claas
• System evaluation method and conclusions for the tractor implement interface architecture	Mike Geissler, TU Dresden
• BMW i3 mit eDrive	
• Formula 1 Student – Electrified race car	Patrick Wappler, Elbflorace

6:00 pm Barbecue and beer at the test barn

- Special guest: a touring minstrel

02 July

Wednesday

System components, research and development activities and visions

8:30 am Start

• Tendencies in battery electric Vehicles and development of a model range of electric motors for agricultural machines	Reinhold Bals, IAV
• Electrification in agricultural machines from a systems integrator and component supplier point of view	Gernot Steinmair, Magna Powertrain
• Customer value through electrification	Joachim Sobotzik, John Deere

9:45 am Coffee Break

• Research status and activities on high speed electrical drives	Jan Schröter, RWTH Aachen
• Power split drive architecture for tractor implement systems	A. Roth, Roth Systemtechnik Tim Bögel, TU Dresden
• Study of an electrified Combine header	Friedrich Moertl, Compact Dynamics

11:30 am Coffee Break

• Multi Tool Trac, innovation from practice	Paul van Ham, Multi Tool Trac BV
• Electrification and Vision 2025	Heinrich Prankl, BLT Wieselburg
• Final Remarks	Thomas Herlitzius, Heinrich Prankl

1:00 pm End