

Motor-CAD European User Conference

6TH - 7TH APRIL 2022 | MANCHESTER, UK | REGISTER NOW

The 2022 Motor-CAD European User Conference will provide an opportunity for motor designers to learn about technological developments in e-machine design, participate in interactive design clinics and discuss their motor design challenges and best practice with the team that develops Motor-CAD software.

Speaker Highlights

Rolls-Royce Electrical Plc | *Zoltan Nadudvari*

Investigating the Effect of the Power Electronics on the Electrical Machine Performance

Mercedes-Benz AG | *Patricia Penabad*

An Automated Design Strategy for Multi-Physics and Multi-Target Optimization of E-Machines

Jaguar Land Rover | *Matthew Crouch*

Traction eMachine Drive Cycle Efficiency for an AWD BEV with Mixed eMachine Technology vs Dual PM eMachine

Arrival | *Leon Rodrigues*

Skewing Strategies in Automotive Traction Machines

Magna Powertrain GmbH & Co KG | *Giuseppe Volpe*

eMotor Development: Competences and Tools

MathWorks Inc. | *Angel Gonzalez Llacer*

Exporting a Thermal Model from Motor-CAD to Simulink/Simscape Including Rotational Speed and Flow Rate Dependencies

China Euro Vehicle Technology (CEVT) | *Branko Ban*

Systematic Metamodel-Based Optimization Study of Synchronous Reluctance Machine Rotor Barrier Topologies

University of Warwick | *Juliette Soulard*

Impact of Manufacturing on E-Machine Performance and Modelling

Flanders Make & Dana Inc. | *Branimir Mrak*

Custom Motor-CAD Thermal Lumped Parameter Network for Simulation Study of Magnetic Coil Divider

Ansys Inc. | *Marius Rosu*

The Ansys Motor Design & Simulation vision

CADFEM GmbH | *Philipp Siehr*

NVH analysis with Motor-CAD, Maxwell and Twin Builder

Tirius Ltd. | *Tim Allen*

A Question of Scale: Consideration of Alternative Approaches to Electrical Machine Construction

Advanced Modelling Clinics

The team of design engineers and software developers who develop Motor-CAD will be running a number of advanced motor design clinics as part of this event, including:

- **Noise, Vibration and Harshness (NVH) / Mechanical Analysis Clinic**
- **Losses Clinic**
- **Thermal Analysis Clinic**
- **Optimisation Clinic**
- **Workflow Couplings Clinic**

Details & How to Register

Venue

Science and Industry Museum, Liverpool Road, Manchester, M3 4FP, United Kingdom.

Date and Time

8.30am Wednesday 6th April - 5pm Thursday 7th April (BST)

Cost

A ticket to the Motor-CAD European User Conference costs **£300 (excluding VAT)** and includes:

- Admission to the conference on the 6th and 7th April.
- Lunch and refreshments on both conference days.
- The conference dinner & drinks on the evening of Wednesday 6th April.

Find out how to register for this event on the Motor Design Ltd [website](#).

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Motor-CAD European User Conference Agenda – All timings listed in this agenda are in British Summer Time (BST).

Day 1 | Wednesday 6th April

08:30 - 09:00	Registration & Coffee
09:00 - 09:20	Welcome & Introduction - James Goss, Ph.D. CEO Motor Design Ltd.
09:20 - 09:45	An Automated Design Strategy for Multi-Physics and Multi-Target Optimization of E-Machines - Patricia Penabad Ph.D., R&D Engineer - eMotor Mercedes-Benz AG
09:45 - 10:10	Systematic Metamodel-Based Optimization Study of Synchronous Reluctance Machine Rotor Barrier Topologies - Branko Ban E-Machine Specialist China Euro Vehicle Technology (CEVT)
10:10 - 10:35	Investigating the Effect of the Power Electronics on the Electrical Machine Performance - Zoltan Nadudvari Development Engineer Rolls-Royce Electrical Plc
10:35 - 10:50	Joint Q&A Session
10:50 - 11:20	Coffee Break
11:20 - 12:20	Introduction to Motor-CAD v15 (2022 R1) - Mircea Popescu, Ph.D., Chief Technology Officer at Motor Design Ltd. Dougie Hawkins, Chief Product Officer at Motor Design Ltd.
12:20 - 12:50	The Ansys Motor Design & Simulation vision - Marius Rosu, Ph.D. Electromechanical Lead Product Manager Ansys Inc.
12:50 - 13:50	Lunch
13:50 - 14:15	A Question of Scale: Consideration of Alternative Approaches to Electrical Machine Construction - Tim Allen, Ph.D. Director Tirius Ltd.
14:15 - 14:40	Impact of Manufacturing on E-Machine Performance and Modelling - Juliette Soulard, Ph.D. Associate Professor Electric Machines University of Warwick
14:40 - 15:05	Skewing Strategies in Automotive Traction Machines - Leon Rodrigues, Ph.D. Technical Specialist - Electrical Machines Arrival
15:05 - 15:20	Joint Q&A Session
15:20 - 15:40	Coffee Break
15:40 - 16:10	NVH analysis with Motor-CAD, Maxwell and Twin Builder - Philipp Siehr Business Development Manager CADFEM GmbH
16:10 - 16:55	Advanced workshop on NVH analysis - James Packer, Senior Electromechanical Engineer at Motor Design Ltd. Nicolas Riviere, Senior Electric Machine Design Engineer at Motor Design Ltd.
19:00	Dinner & Drinks - Networking Event

Day 2 | Thursday 7th April

08:30 - 09:00	Registration & Coffee
09:00 - 09:25	eMotor Development: Competences and Tools - Giuseppe Volpe, Ph.D. Lead e-Motor Design Engineer Magna Powertrain GmbH & Co KG
09:25 - 09:50	Traction eMachine Drive Cycle Efficiency for an AWD BEV with Mixed eMachine Technology vs Dual PM eMachine - Matthew Crouch eMachine Design Engineer Jaguar Land Rover
09:50 - 10:15	Concept EV Launch - Melanie Michon, Ph.D., Head of Engineering, Motor Design Ltd. John Reeve, Ph.D., Director, FluxSys Ltd.
10:15 - 10:30	Joint Q&A Session
10:30 - 11:00	Coffee Break
11:00 - 11:25	Exporting a Thermal Model from Motor-CAD to Simulink/Simscape Including Rotational Speed and Flow Rate Dependencies - Angel Gonzalez Llacer Simscape Electrical Development - Mechatronics Modeling MathWorks Inc.
11:25 - 11:50	Custom Motor-CAD Thermal Lumped Parameter Network for Simulation Study of Magnetic Coil Divider - Branimir Mrak Research Engineer Flanders Make
11:50 - 12:15	From Design to Detailed Analysis with Ansys - Anna Kvarnstrom, Principal Application Engineer at Ansys Inc. Akeel Auckloo, Ph.D., Application Engineering Manager at Ansys Inc.
12:15 - 12:30	Joint Q&A Session
12:30 - 13:30	Lunch
13:30 - 15:45	Advanced Modelling Clinics: Noise, Vibration and Harshness (NVH) / Mechanical Analysis Clinic, Losses Clinic, Thermal Analysis Clinic, Optimisation Clinic & Workflow Couplings Clinic Motor Design Ltd. & Ansys Inc.
15:45 - 16:00	Coffee Break
16:00 - 17:00	Museum Tour & Close

* Please note that this agenda may be subject to change. All timings listed in this agenda are in British Summer Time (BST).