

Ansys Motor-CAD Virtual Global Summit

8TH - 12TH FEBRUARY 2021 | VIRTUAL EVENT | FREE

About the Summit

The 2021 Motor-CAD Global Summit is **free to attend** and will provide an online space where motor designers can learn about technological developments in e-machine design, participate in interactive design clinics, access training materials, and discuss their motor design challenges and best practice with the team who develop Motor-CAD software (Motor Design Ltd).

Join us for live technical presentations and motor design clinics

- **Technical presentations** from design engineers at the cutting edge of electric motor design, including speakers from Cummins, American Axle & Manufacturing, Great Wall Motors, CADFEM, University of Zagreb, Georgia Institute of Technology and the Illinois Institute of Technology.
- Learn about modelling hairpin windings in Motor-CAD, oil-spray cooling, e-machine optimisation and the new features in Motor-CAD v14.
- Take part in **advanced design clinics** covering thermal analysis, systems, forces and losses.

Access our online 'Introduction to Motor-CAD' training course materials and live Q&A sessions

- Benefit from our offer of a free Motor-CAD evaluation licence for the duration of the Summit.
- Gain access to our wide range of **introductory training videos**, covering the design of: Brushless permanent magnet machines, Inverter-fed induction machines, Direct online induction machines, Switched reluctance machines, Synchronous reluctance machines, Synchronous wound field generators, Brushless DC motors, Single phase induction machines.
- Have your questions answered during our **live Q&A sessions**, where our experts will be on hand with software demonstrations.

Live Session Agenda – All timings listed in this agenda are in Greenwich Mean Time (GMT).

Day 1 | Monday 8th February

09:00 GMT	Summit portal opens: Explore the training room, interact with the team who develop Motor-CAD and contribute to discussions in the Lounge.
13:30 - 14:00	Welcome & Brief Introduction to Motor-CAD v14 New Features - James Goss, Ph.D., CEO of Motor Design Ltd
14:00 - 14:30	Necessary Product and Process Advancements for the Application of Traction Motors in Electric and Hybrid Electric Vehicles Using Motor-CAD - John Morgante, Sr. Technical Manager Electric Machines at American Axle & Manufacturing
14:30 - 14:40	Break
14:40 - 15:10	Modelling of Electric Machines with Hairpin Windings in Motor-CAD - Shaoshen Xue, Ph.D., Senior Research Engineer at Motor Design Ltd
15:10 - 15:40	High Performance Wound Field and Permanent Magnet Synchronous Machines for EV Traction - Ian Brown, Ph.D., Associate Professor at the Illinois Institute of Technology
15:40 - 15:50	Break
15:50 - 16:20	Experimental Oil Jet Cooling for Hairpin Windings with a Motor-CAD Model Calibration Workflow - Liu Chuan, Ph.D. (KTP Associate with the University of Nottingham) & Husain Adam (Software Development Engineer), Motor Design Ltd
16:20 - 16:50	NVH analysis of an EV IPM motor including PWM influence - Martin Hanke, Dr. rer. nat., (Multiphysics Professional) & Jürgen Wibbeler, Dr.-Ing., CADFEM GmbH
16:50 - 17:00	Close

Day 2 | Tuesday 9th February

- 13:30 - 13:35 Welcome & Introduction - **Melanie Michon, Ph.D., Head of Engineering at Motor Design Ltd**
- 13:35 - 14:05 Speeding up multi-objective optimization of E-motor development using Motor-CAD - **Gereon Pusch, Dipl.-Ing., (Department Manager E-Motor Development), Tim Schwartz, MSc., (Junior E-Motor Engineer) & Sebastian Igel, MSc., (Junior E-Motor Engineer), Great Wall Motors**
- 14:05 - 14:35 How Motor-CAD is helping to solve some challenges in heavy duty trucks - **Krzysztof Paciura, Power Electronics & Electrical Machines Leader at Cummins Corporate R&T UK**
- 14:35 - 14:45 Break
- 14:45 - 15:15 E-Machine Optimisation Considering EDU Requirements - **Jonathan Godbehere, Ph.D., Senior E-Machine Specialist at Motor Design Ltd**
- 15:15 - 15:45 Robust feasibility and region detection algorithm for non-template Motor-CAD design optimization - **Branko Ban, E-Machine Specialist at the University of Zagreb**
- 15:45 - 16:55 Workshop on the new features in Motor-CAD v14 - **Douglas Hawkins (Chief Product Officer) and Mircea Popescu, Ph.D., (Chief Technology Officer), Motor Design Ltd**
- 16:55 - 17:00 Close

Day 3 | Wednesday 10th February

- 14:00 - 15:00 Introduction to Motor-CAD: Q&A on Thermal Analysis - **Husain Adam (Software Development Engineer) & Jonathan Godbehere, Ph.D., (Senior E-Machine Specialist), Motor Design Ltd**
- 15:00 - 16:00 Advanced Design with Motor-CAD: Thermal Analysis Clinic - **Eddie Chong, Ph.D., (Technical Lead Asia) & Husain Adam (Software Development Engineer), Motor Design Ltd**
- 16:00 - 16:45 Seminar on Validation and Parametric Investigations Using a LPTN model of an IPM Motor - **Sebastien Sequeira, Graduate Research Assistant at Georgia Institute of Technology and National Renewable Energy Laboratory**

Day 4 | Thursday 11th February

- 14:00 - 15:00 Introduction to Motor-CAD: Q&A on Electromagnetic Analysis and Efficiency Maps - **Sarah Woodrow (Senior Application Engineer) & Bo Ren, Ph.D., (Senior E-Machine Specialist), Motor Design Ltd**
- 15:00 - 16:00 Advanced Design with Motor-CAD: Systems Clinic - **James Goss, Ph.D., (CEO) & Giada Venturini (Research Engineer), Motor Design Ltd**

Day 5 | Friday 12th February

- 12:00 - 13:00 Advanced Design with Motor-CAD: Motor-CAD and optiSLang Best Practices Seminar - **Dr. Jonathan Godbehere (Senior E-Machine Specialist) & Nicolas Riviere (Senior E-Machine Specialist), Motor Design Ltd**
- 13:00 - 14:00 Break
- 14:00 - 15:00 Introduction to Motor-CAD: Q&A on Mechanical Analysis and Links to Other Software - **Nicolas Riviere (Senior E-Machine Specialist) & Matt Jones (Software Development Engineer), Motor Design Ltd**
- 15:00 - 16:00 Advanced Design with Motor-CAD: Forces and Losses Clinic - **Mircea Popescu, Ph.D., (Chief Technology Officer) & Melanie Michon, Ph.D., (Head of Engineering), Motor Design Ltd**
- 16:00 - 16:10 Summit Close

*Please note that this agenda may be subject to change. All timings listed in this agenda are in Greenwich Mean Time (GMT). Live sessions will be hosted on 'GoToWebinar' and recordings of live sessions will be accessible from the portal for those who are unable to attend.

Free to attend – Register now at www.motor-design.com/motor-cad-global-user-summit-2021