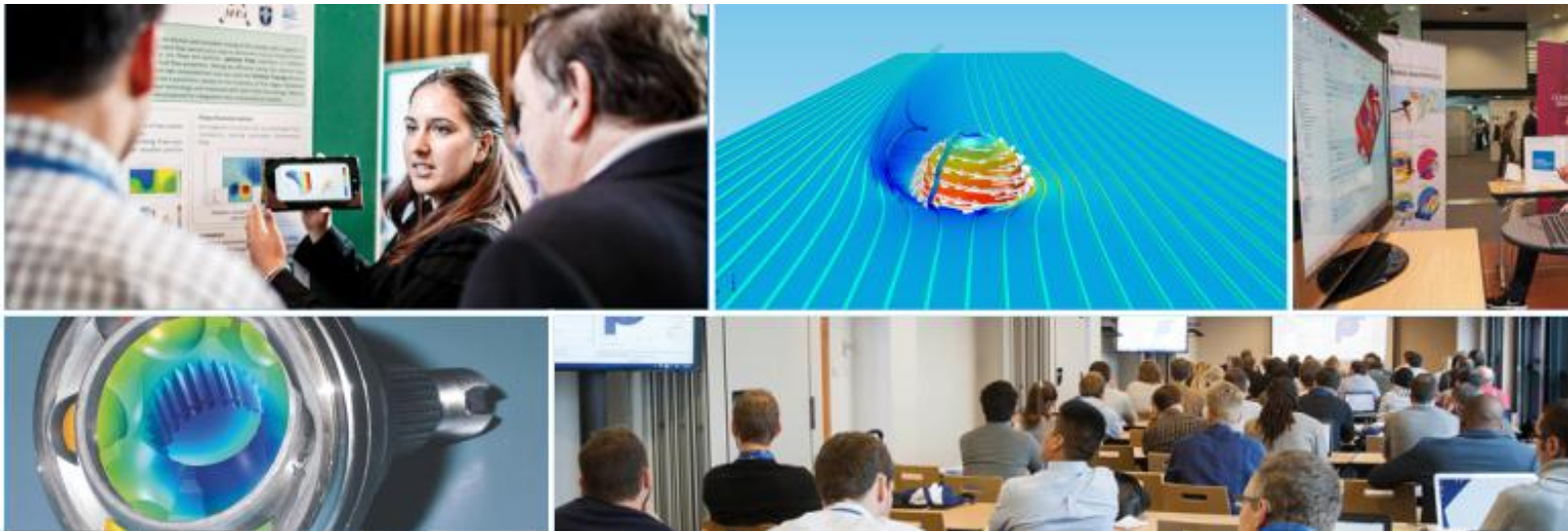


COMSOL Multiphysics 2026

10th annual conference

Lednice 28. - 29. 5. 2026



Keynote Speakers



Nancy Bannach

Developer, COMSOL, Germany

Porous Media Flow and Transport, CFD, Chemical Engineering



Daniel Ericsson

Founder of Deflexional, Sweden

Consultancy, Engineering Simulation Applications



Jiří Hauptvogel

Development engineer, Nammo AS, Norway

Structural, Thermal, and Multiphysics Simulations



Andrii Grytsan

Technical Sales Engineer, COMSOL, Sweden

Solid Mechanics, Industrial Finite Element Calculations

on-line

Our Team



Martin Kožíšek
Product Manager
HUMUSOFT s.r.o.



Martin Foltin
Country Manager SK
HUMUSOFT s.r.o.



Tomáš Vrbata
Application Engineer
HUMUSOFT s.r.o.



Matouš Lorenc
Application Engineer
HUMUSOFT s.r.o.

Our Team



Jaroslav Jirkovský
Application Engineer Manager
HUMUSOFT s.r.o.



Jiří Šusta
HeavyHorse Specialist
HUMUSOFT s.r.o.



Markéta Šimurdová
Sales Assistant
HUMUSOFT s.r.o.



Petr Byron
Director
HUMUSOFT s.r.o.

Schedule Thursday 28.5.

- 9:30 **Opening Remarks**
Petr Byron, HUMUSOFT
- 9:40 **New features in COMSOL 6.4**
Martin Kožíšek, HUMUSOFT
- 10:00 **Keynote Best Practices for Accurate and Efficient Simulation**
Nancy Bannach, COMSOL
- 10:30 **Coffee Break, Digital Poster Session Day 1**
- 11:15 **Keynote COMSOL Multiphysics in Development and Manufacturing Workflows for Defense and Space Industry**
Jiri Hauptvogel, Nammo AS
- 11:45 **High-voltage Sensor, Rain Influence Suppression**
Josef Stejskal, KPB Intra
- 12:10 **Modelling and Optimization of Laser Systems at Fraunhofer IOSB**
Helena Picmausova, Fraunhofer IOSB
- 12:30 **Laser Amplifier Thermo-Optic Simulations for Fusion Power**
Gavin Friedman, Focused Energy
- 13:00 **Lunch**
- 14:30 **Keynote Turning COMSOL® Simulations into Specialized Engineering Tools**
Daniel Ericsson, Deflexional
- 15:00 **COMSOL Hands-on Minicourse, Electromagnetics**
Matouš Lorenc, HUMUSOFT
- 15:30 **COMSOL Hands-on Minicourse, Material Homogenization**
Tomáš Vrbata, HUMUSOFT
- 16:00 **Coffee Break, Digital Poster Session Day 1**
- 17:00 **Ion Concentration and Electric Potential in IPMC**
David Vokoun, Exergyn CZ
- 17:15 **Thermal Optimization of Satellite Payload**
Tomáš Tichý, Hilase

- 17:30 **Simulations of Electronic Components in Automotive**
Jan Kotek, KOSTAL Engineering CR
- 17:45 **Modeling of the Photoelectrical Response of NV Diamond**
Josef Souček, IMO IMOMECE, Belgium
- 18:00 **Electric Discharge Module**
Matouš Lorenc, HUMUSOFT, Ladislav Musil, Jakub Fink, IT CAS
- 18:20 **Micro-credential Simulation Course for Industry**
Jan Mikulka, Brno University of Technology
- 18:30 **30-Minutes Coordination Meeting: COMSOL at universities**
- 19:15 **Dinner and Social Evening**

Wine Cellar



Schedule Friday 29.5.

- 7:30 **Breakfast served until 9:30**
- 9:30 **COMSOL Hands-on Minicourse, Meshing, Biomedical**
Tomáš Vrbata, HUMUSOFT
- 10:00 **COMSOL Hands-on Minicourse, Solvers**
Martin Kožíšek, HUMUSOFT
- 10:30 **Coffee Break, Digital Poster Session Day 2**
- 11:00 **Keynote Modeling Mechanical Contact in COMSOL: Workflow and Best Practices**
Andrii Grytsan, COMSOL
- 11:30 **Nucleation and Growth of Calcium Oxalate in an Electric Field**
Kateřina Zedníčková, University of Chemistry and Technology
- 11:45 **Design and Simulation of Labyrinth Seals for Space Applications**
Josef Pouzar, Brno University of Technology
- 12:00 **Simple Modeling of Orthotropic Composites in COMSOL**
Petr Bartoň, Institute of Plasma Physics of the Czech Academy of Sciences
- 12:15 **The Resonance Method: Evaluation of Self-Sustainment Voltage**
Filip Zmeko, University of West Bohemia in Pilsen
- 12:30 **Cohesive Zone Debonding of Metal-polymer Composite System**
Sneha Samal, Institute of Physics of the Czech Academy of Sciences
- 12:45 **Connecting MATLAB with COMSOL Multiphysics for solving 2D axially symmetric problem**
Adam Gálik, University of Žilina
- 13:00 **Lunch**
- 14:00 **Digital Poster Session Day 2**
- 15:00 **Closing Remarks and Prearranged Personal Meetings**

Digital Poster Session

Digital Poster Session Day 1

Model Based Design in Simulink

Jaroslav Jirkovský, HUMUSOFT

High-Performance Computing Workstations HeavyHorse

Jiří Šusta, HUMUSOFT

Why Good Postprocessing Matters

Nancy Bannach, COMSOL

Thermo-Mechanical Simulation of SiC Transistor

Patrik Šuhaj, Slovak University of Technology in Bratislava

Digital Poster Session Day 2

Model Based Design in Simulink

Jaroslav Jirkovský, HUMUSOFT

Hydrodynamics of Red Blood Cells

Krzysztof Tadyszak, IMC Czech Academy of Sciences

Modeling of Transport through Artificial Skin Membrane Model

Adam Liberda, Brno University of Technology

Modeling and Analysis of Thermal Runaway in Battery Systems

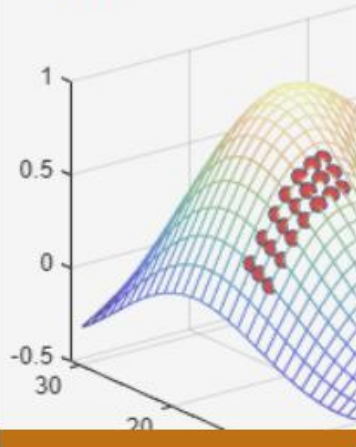
Boris Bajla, Slovak University of Technology in Bratislava

- **Thursday, Day 1**
 - 10:30 – 11:15
 - 14:00 – 14:30
 - 16:00 – 17:00
- **Consultation Opportunity**
 - continues all day
- **Friday, Day 2**
 - 10:30 – 11:00
 - 14:00 – 15:00
- **Consultation Opportunity**
 - continues all day

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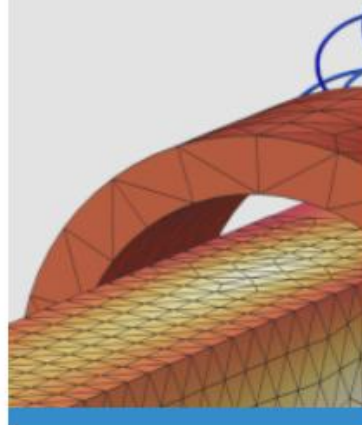
MATLAB & Simulink

Technické výpočty
a simulace



COMSOL

Simulace
multifyzikálních úloh



dSPACE

Simulace v reálném
čase



HeavyHorse

Výkonné výpočetní
pracovní stanice



Sales & Support Training Consultancy

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Guidelines

- the conference is not being recorded
- Internet access
 - no passcode
- WhatsApp Community – **Konference COMSOL Multiphysics**
 - immediate current information
 - no sharing of phone numbers (admins phones shared only)
 - questions and remarks send please directly to admins
- refreshments and drinks for conference participants free of charge
 - prove yourself with a badge
 - drinks: coffee, tea, soft drinks, beer, draft wine



Scan by WhatsApp!



Enjoy Photo Corner!



Technical Computing Camp 2026

- **13. ročník letního setkání příznivců technických výpočtů a počítačových simulací**
- Široký prostor pro neformální diskuze a výměnu názorů
- Setkání s lidmi z nejrůznějších oborů
- Informace o systémech MATLAB, COMSOL a dSPACE
- Interaktivní ukázky aplikací na hi-tech "hračkách"
 - Arduino, Raspberry Pi, kamery, roboti, mobilní aplikace, kamery,...
- Přednášky, demo ukázky od uživatelů
- Soutěž o nejlepší uživatelské projekty

Brněnská přehrada

Hotel Rakovec

10. - 11.9.
(čtvrtek a pátek)



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COMSOL Multiphysics 2027

11th annual conference

Hotel Galant - Mikulov **27. - 28. 5. 2027**

