# Invitation to the 12<sup>th</sup> conference MITAV MITAV 2025

Union of Czech Mathematicians and Physicists, Brno branch (JČMF) cordially invite you to the conference **MITAV** (**M**athematics, **I**nformation **T**echnologies, and **A**pplied Sciences), organized in co-operation with

the Faculty of Military Technology of the University of Defence,
Faculty of Education and Faculty of Economics and Administration of Masaryk University,
Faculty of Electrical Engineering and Communication of Brno University of Technology
and the Department of Informatics, Armed Forces Academy of General M. R. Štefánik,
Liptovský Mikuláš.

The conference MITAV 2025 will take place in the Club of the University of Defence, Brno, Šumavská 4, June 19 and 20, 2025.



# Aims and target group of the conference

MITAV 2025 is the 12th year of a conference in mathematics, IT and applied sciences. It is organized for teachers of all types of schools and focuses on the latest findings and experience in mathematics, informatics and other sciences as well as on teaching these at all school levels (including by distance means such as e-learning). We focus our attention especially on education in areas that are necessary and in high demand for today's society. The conference is a meeting place for researchers and teachers from various types of schools and universities where their latest experience can be shared and discussed. Presentations of students (master or PhD candidates) and junior teachers are welcome as well.

#### MITAV 2025 is planned in two sections:

- 1. Scientific section
- 2. Educational section (general issues of education at primary and secondary schools and at universities)

Especially welcome are teachers who use innovative methods and approaches, solve interesting projects or have cross-subject experience.

Conference languages: English, Czech, Slovak

#### **International scientific committee**

#### **Prof. Leonid BEREZANSKY**

Ben Gurion University of the Negev, Beer Sheva, Israel

#### Prof. Zuzana DOŠLÁ

Masaryk University, Faculty of Science, Brno, the Czech Republic

#### Prof. Irada DZHALLADOVA

Kyiv National Economic Vadym Getman University, Ukraine

# Prof. Mihály PITUK

University of Pannonia, Faculty of Information Technology, Veszprém, Hungary

# Prof. Ľubica STUCHLÍKOVÁ

Slovak University of Technology in Bratislava, Faculty of Electrical Engineering and Information Technology, Bratislava, Slovakia

# **International programme committee**

#### Chair:

## Michal NOVÁK

Brno University of Technology, Faculty of Electrical Engineering and Communication, Brno, the Czech Republic

#### Members:

## Jaromír BAŠTINEC

Brno University of Technology, Faculty of Electrical Engineering and Communication, Brno, the Czech Republic

#### **L'ubomír DEDERA**

Armed Forces Academy of General M. R. Štefánik, Liptovský Mikuláš, Slovakia

#### Jan HODICKÝ

M&S Technical SME at NATO HQ SACT, Norfolk, Virginia, USA

#### Miroslav HRUBÝ

University of Defence, Faculty of Military Technology, Brno, the Czech Republic

#### Edita KOLÁŘOVÁ

Brno University of Technology, Faculty of Electrical Engineering and Communication, Brno, the Czech Republic

# **Piet KOMMERS**

Professor of UNESCO Learning Technologies, Emeritus University of Twente, Enschede, the Netherlands

#### **Nataliia MORZE**

Borys Grinchenko Kiev University, Kiev, Ukraine

#### Václav PŘENOSIL

Masaryk University, Faculty of Informatics, Brno, the Czech Republic

#### Magdalena ROSZAK

Poznan University of Medical Sciences, Department of Computer Science and Statistics, Poznań, Poland

#### Eugenia SMYRNOVA-TRYBULSKA

University of Silesia, Katowice - Cieszyn, Poland

# Olga YAKOVLEVA

Herzen State Pedagogical University of Russia, St. Petersburg, Russia

# Czech and Slovak steering committee of the conference

## Chair: Edita KOLÁŘOVÁ

Brno University of Technology, Faculty of Electrical Engineering and Communication, Brno, the Czech Republic

#### Members:

#### Luboš BAUER

Masaryk University, Faculty of Economics and Administration, Department of Applied Mathematics and Informatics, Brno, the Czech Republic

#### Jaroslav BERÁNEK

Masaryk University, Faculty of Education, Department of Mathematics, Brno, the Czech Republic

#### Milan JIRSA

University of Defence, Faculty of Military Technology, Department of Informatics and Cyber Operations, Brno, the Czech Republic

#### Michal TURČANÍK

Armed Forces Academy of General M. R. Štefánik, Liptovský Mikuláš, Slovakia

# Preliminary programme of the conference

Thursday, June 19, 2025

12:00-13:45 Registration of the participants

14:00-15:00 Keynote lecture

15:00-15:30 Break

15:30-18:00 Presentations in parallel sections

19:00-22:00 Conference dinner followed by informal discussions on a boat sailing along the Brno lake

Friday, June 20, 2025

09:00-13:00 Presentations in parallel sections

13:00 Closing

#### **Conference fee**

Registration fee for the MITAV 2025 conference is CZK 1800. Students, including doctoral students, pay reduced registration fee (by half), i.e. CZK 900.

# Please pay the fee to:

Union of Czech Mathematicians and Physicists, Brno branch Janáčkovo nám. 654/2A, 602 00 BRNO, Czech Republic

IČ: 64327141

Contact person: doc. RNDr. Edita Kolářová, Ph.D.

Phone: +420 54114 6054 e-mail: kolara@vut.cz

# Bank transfer from abroad until April 30, 2025 (bank fees have to be paid by the participant)

Bank name: Fio banka, a.s. BIC (SWIFT): FIOBCZPPXXX Purpose of Payment: MITAV2025

Information for Beneficiary: *Name of Participant* Account Name: JČMF pobočný spolek Brno

IBAN (Account No.): CZ692010000002700604074

# Participants from the Czech Republic: Account number: 2700604074/2010

VS: will be assigned upon receipt of the filled-in registration form

Confirmation of the payment will be issued at the conference.

#### Accommodation

The accommodation must be booked by the conference participants themself. In the case of help needed, the organizers offer advising.

Web konference MITAV <a href="https://mitav.unob.cz/">https://mitav.unob.cz/</a>

#### **Instructions for conference participants**

- Send the filled-in application form for MITAV 2025 and your conference paper in Czech, Slovak or English by March 31, 2025 to mitav.conference@gmail.com.
   Please, use the template (MITAV\_template) and send your contribution in docx (doc) or TeX and also always in pdf formats.
- The authors are responsible for the content and formal layout of the contributions. Checking the papers and the decision about their acceptance are in the competence of Czech members of the international programme committee. All the papers which will be in compliance with content and formal requirements will be included on the conference CD (supplement of the printed Collection of abstracts MITAV 2025).
- The time allocated to presentation of the contribution at the conference is 15 minutes including discussion. The MITAV 2025 participants who will not be able to present their papers in Brno personally, can send the appropriate video file by June 1, 2025. This video file will be included in the conference CD. A notebook and a data projector will be available for the speakers at the conference room.
- The programme of the conference will be available by June 7, 2025.

The post-conference e-proceedings in English:

- Selected contributions (presented personally or by video file) can be updated by their authors for the post-conference e-proceedings after the conference.
- Original or updated conference contributions in English will be peer-reviewed by two independent reviewers from different countries.
- The final update of contributions according to the reviewers' recommendations will be the authors' exclusive right.
- Finally, the reviewers will decide definitely if the contributions will be accepted to the post-conference e-proceedings of selected papers, or not. The proceedings will be sent to the process of Web of Science indexation by the end of 2025.

Each MITAV 2025 participant will receive printed **Collection of abstracts MITAV 2025** with ISBN. **CD supplement** of this printed volume will contain all accepted contributions of the conference and video files of participants who cannot present their papers in Brno personally.

In autumn 2025, a **post-conference e-proceedings** with ISBN (different from the ISBN collection of abstracts) will be published, containing updated and possibly extended versions of selected MITAV 2025 contributions.

The proceedings will be published in English and will be sent to the Web of Science database of **Clarivate Analytics** (earlier Thomson Reuters) (<a href="https://apps.webofknowledge.com">https://apps.webofknowledge.com</a>) for consideration.

Post-conference CD proceedings of selected papers extended versions from MITAV conferences (see at <a href="http://mitav.unob.cz">http://mitav.unob.cz</a>) are being sent to the Web of Science of Clarivate Analytics (earlier Thomson Reuters). The MITAV 2016, 2017 and 2018 proceedings have been indexed yet. Other proceedings are in the process.

Thank you for your interest in MITAV 2025. We look forward to seeing you in Brno!