

High-Performance Computing in Science and Engineering 2026

Tomáš Kozubek

Hotel Soláň, 2026



About HPCSE

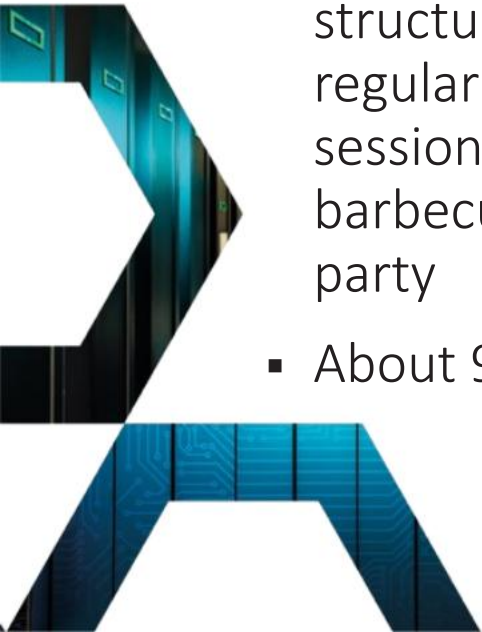
- The 7th edition
- Started in May 2013
- Every two years
- Shift from 2021 to 2022 (because of Covid)
- Same conference venue
- Similar programme structure with invited and regular speakers, poster session, social events, barbecue, and conference party
- About 90 participants



Conference topics

- High performance computing
- Applied mathematics
- Numerical analysis
- HPDA
- Machine/deep learning
- Quantum computing
- Advanced visualization

Goal: to bring together national and international specialists to exchange experience and ideas, and initiate new research collaborations.



Special session for Zdeněk Dostál

This year's edition of HPCSE is proudly dedicated to the **80th birthday of Prof. Zdeněk Dostál**, honouring his long-standing contributions to applied mathematics and HPC.

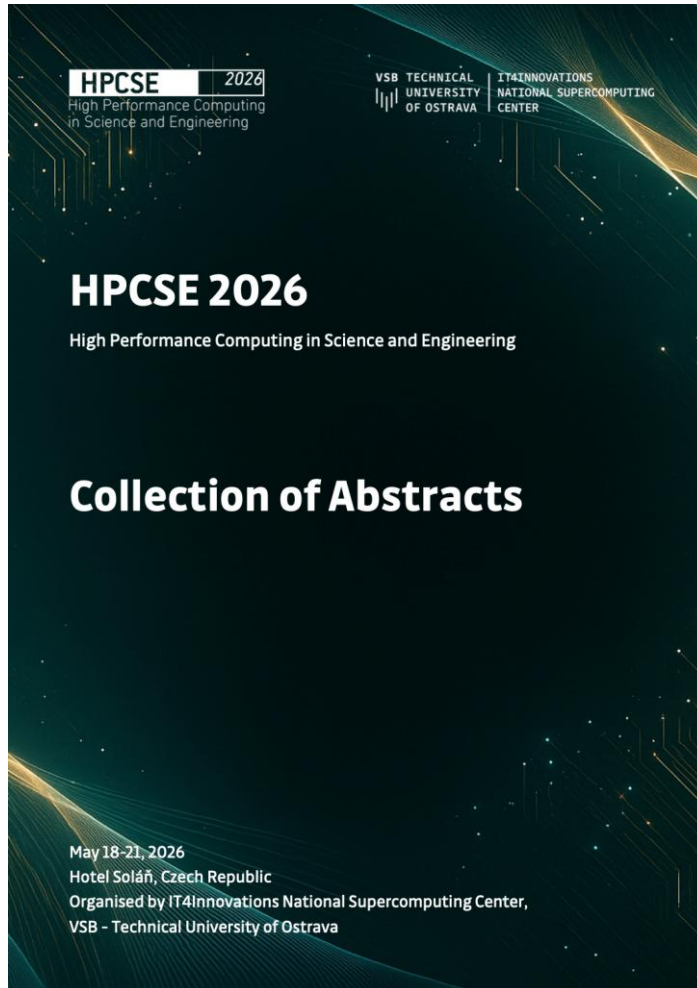
Warmest congratulations on your 80th birthday.

We wish you good health, much joy and many wonderful experiences, and many more fulfilling years to come

Special session on Wednesday evening!!!



Collection of abstracts & programme



<https://hpcse.it4i.cz/HPCSE26/program.php>

Conference Programme

Monday, 18 May

10:00 - 12:00 **Registration, discussion, refreshment**

12:00 - 13:45 **Lunch**

13:45 - 14:00 **Tomáš Kozubek:** Opening

14:00 - 14:30 **Vít Vondrák:** News from IT4Innovations and the Czech National Competence Center

14:30 - 16:00 Chairman: T. Kozubek

Ulrich Langer: Goal-oriented adaptive space-time finite element solvers for regularized parabolic p-Laplace problems

Kirk M. Soodhalter: Extensions and applications of admissible and attainable convergence theory for GMRES

16:00 - 16:30 **Coffee break**

16:30 - 18:00 Chairman: J. Jaroš

Daniel Sýkora: The Devil in the detAll: Breaking Through GenAI's Quality Ceiling

Dominika Regéciová: Best Practices: The Best Time To Rotate Your Credentials Is Now

Petra Svobodová: Multi-Camera Vision System for Operator Monitoring and Scene Understanding in Isolators

Simona Bérešová: Gradient-Informed Proposals for Surrogate-Assisted Bayesian Sampling

19:00 **Welcome Party**

Social events (Tuesday afternoon)

1. Relaxation in Wellness & Spa Centre of the Hotel Soláň



2. A visit of the National Open Air Museum



3. A trip to the Pustevny Mountains with the fantastic views from the Valaska Sky Walk.



Register at the registration desk.



Invited speakers



Erin Claire Carson

Charles University



Michael Mc Gettrick

University of Galway



Michael Granitzer

University of Passau



Rolf Krause

King Abdullah University of Science
and Technology



Ulrich Langer

Johannes Kepler Universität Linz



Jakub Mielczarek

Jagellonian University



Matthias Möller

Delft University of Technology



Matthias Obst

University of Gothenburg



Ulrich Rüde

Friedrich-Alexander-Universität
Erlangen-Nürnberg



Martin Schulz

Technical University of Munich



Kirk M. Soodhalter

The University of Dublin



Olaf Steinbach

Technische Universität Graz



Daniel Sýkora

Czech Technical University in Prague

Scientific committee

Jaroslav Hron

Charles University

Jiří Jaroš

Brno University of Technology

Tomáš Kozubek

VSB – Technical University of
Ostrava

Jaroslav Kruis

Czech Technical University in
Prague

Dalibor Lukáš

VSB – Technical University of
Ostrava

Jan Martinovič

VSB – Technical University of
Ostrava

Tomáš Oberhuber

Czech Technical University in
Prague

Jakub Šístek

Institute of Mathematics of the CAS

Petr Tichý

Charles University

Vít Vondrák

VSB – Technical University of
Ostrava

General information

- 13 invited speakers
- 20 regular speakers
- 39 posters

Poster session on Tuesday evening

<https://hpcse.it4i.cz/HPCSE26/posters.php>

Swimming pool with hot salty water and fitness centre (for free)

ORGANIZING COMMITTEE

In the case of some troubles, please, contact organizers.

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of Ostrava

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Partners and support



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**Thank you to all of you for
coming, and special thanks to
the organisers !!!**

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