

# Croatian Competence Centre for HPC Day

8<sup>th</sup> November 2023  srce

We invite you to join us at the Croatian Competence Centre for High Performance Computing Day, which will be held on November 8, 2023, starting at 9:00 a.m. in the premises of the University of Zagreb University Computing Centre (SRCE) at J. Marohnića 5, Zagreb.

Learn more about:

- High Performance Computing
- the importance of HPC technologies and the processing of large amounts of data using supercomputers
- EuroHPC initiative and the development of the HPC environment at the European and world level
- services of the Croatian Competence Centre for HPC
- the EuroCC 2 project
- examples of good practices from scientists, institutions, and companies and
- how the application of HPC technology can improve your work, whether you come from the world of science or business

The number of participants is limited, and participation in the event is free for all participants with mandatory registration via the [form](#).

## PROGRAMME

9:00 – 9:30

Registration and coffee

Opening

9:30 – 10:00

- Ivan Marić, University of Zagreb University Computing Centre
- Ministry of Science and Education Representative

HPC in Europe – state of play and plans for the future

10:00 – 10:30

***EuroHPC JU: Leading the Way in European Supercomputing***  
Klara Meštrović, EuroHPC JU

***Expanding the Network of Competences & Services in HPC+ in Europe – EuroCC 2***  
Natalie Lewandowski, High-Performance Computing Center Stuttgart i EuroCC 2 (*online*)

Presentation of the activities of the Croatian Competence Centre for HPC

***SRCE and project EuroCC 2***

Emir Imamagić, University of Zagreb University Computing Centre

***Data analysis in biomedical applications - an example for cardiovascular disease***

Goran Martinović, J. J. Strossmayer University of Osijek, Faculty of Electrical Engineering, Computer Science and Information Technology Osijek

***Raising visibility and use of HPC NCC resources at the University of Split***

Ivo Stančić, University of Split, Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture

***HPC e-Lab user cases***

Karolj Skala, Ruđer Bošković Institute

***HPC and industry in Croatia: step by step***

Lado Kranjčević, University of Rijeka, Faculty of Engineering

11:30 – 12:00

Break

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12:00 – 12:30

## Keynote:

**Computational Issues when Testing Using Functional Test Statistic: The R Package GET**  
Tomáš Mrkvička, University of South Bohemia (*online*)

## HPC in practice

12:30 – 13:30

### **Deep learning in mathematics**

Domagoj Vlah, University of Zagreb, Faculty of Electrical Engineering and Computing

### **Presentation of the H\_SIM-2D model for shallow water calculation**

Marinko Nujić, IB-Nujić d.o.o.

### **Influence of HPC on preclinical drug discovery**

Luka Bilić, Selvita d.o.o.

### **Modern weather forecast and HPC**

Kristian Horvath, National Hydrometeorological Institute

## Round table "The role of HPC in solving demanding challenges in science and business"

13:30 – 14:30

### Participants:

- Josip Knezović, University of Zagreb, Faculty of Electrical Engineering and Computing
- Kristian Horvath, National Hydrometeorological Institute
- Emir Imamagić, University of Zagreb University Computing Centre
- Klara Meštrović, EuroHPC JU
- Luka Bilić, Selvita d.o.o.

**Moderator:** Dobriša Dobrenić, University of Zagreb University Computing Centre

14:30 – 15:30

## Networking and lunch

15:30 – 16:30

## Individual consultations

The Croatian High Performance Computing Competence Centre (HR HPC CC) is a place where users from science and higher education, industry and public administration have access to innovative solutions and contribute to the strengthening of existing and the development of new competences in the field of high performance computing.

The Centre was established and operates within EuroCC and EuroCC 2 projects financed by EU and national funds, is aligned with the objectives of the EuroHPC initiative, and is managed, with the support of the Ministry of Science and Education, by a consortium of Croatian institutions: University of Zagreb University Computing Centre as head and Faculty of Electrical Engineering, Computer Science and Information Technology Osijek, J. J. Strossmayer University of Osijek, Faculty of Engineering, University of Rijeka, Ruđer Bošković Institute and Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture of the University of Split as members of the consortium.



REPUBLIC OF CROATIA  
Ministry of Science and  
Education



EuroHPC  
Joint Undertaking

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