

High-Performance Computing in Science



Faculty of Mathematics and Informatics

VU MIF IT Research Center provides the following services:

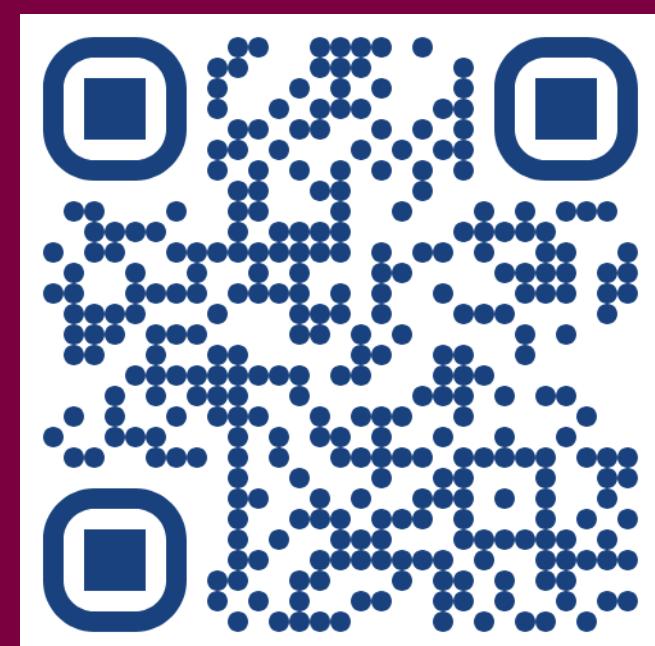
- Create data analysis models in the HPC environment.
- Optimization and creation of analytical algorithms in the HPC environment of business process data visualization and analysis.
- Creation of massive data management and analysis algorithms using cloud computing.
- Development of management and analytical algorithms of sensors and stream data in HPC and cloud computing.
- Relocation and data analysis of business processes in cloud computing.
- Calculations and creation of algorithms for video and audio processing.
- Expert consulting in the IT area.
- Expert consulting and training strategies in the CyberSecurity area.
- Access to **VU MIF** and **EuroHPC JU** European HPC resources.



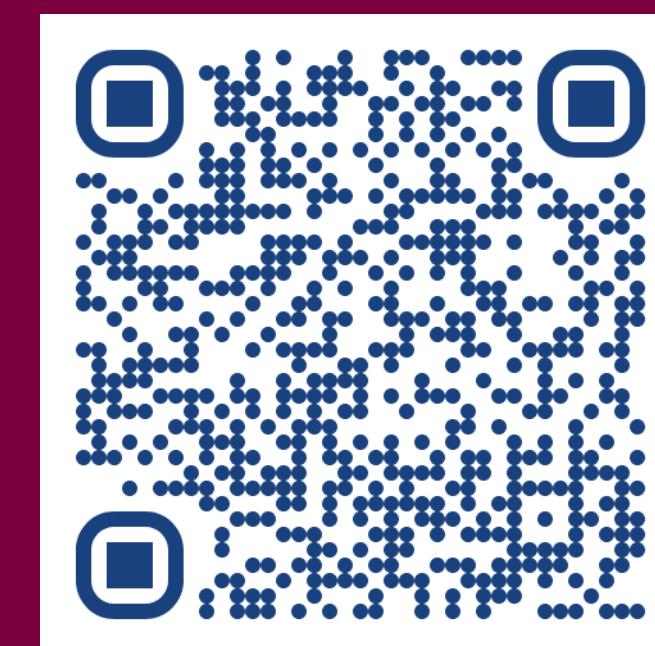
VU MIF HPC



VU MIF IT wiki



EuroHPC JU



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VU MIF CPU Cluster

- Theoretical performance ~ **112 TFLOPS DP**
- 1728 CPU Cores
- 13,8 TB RAM
- InfiniBand 4xEDR(100Gbit/s) interconnect

VU MIF GPU Cluster

- Theoretical performance ~ **3PFLOPS DL (187,2 TFLOPS DP)**
- 24 GPU: NVIDIA Tesla V100 32GB SMX2
- 1,5 TB RAM
- InfiniBand 4xEDR(100Gbit/s) interconnect