Student Scientific Conference of FAS 2025 (SVK+SVKB 2025)

Plzeň, May 22, 2025

Session "PhD." (corridor in front of the halls, 10:15-12:15)	
Chair	Jiří Martínek
7:30	**Registration**
8:00	**Conference opening**
10:15	**Poster session (10:15-12:15), lunch**
15:30	**Announcement of results and the end of the conference**
List of posters (Physics, Mathematics, Mechanics, Geomathematics)	
Jan Koloros	Ultra-low-resistivity nitrogen-doped Cu_2O thin films fabricated by reactive high-power impulse magnetron sputtering (HiPIMS)
Sadoon Farrukh	Strongly thermochromic W-doped VO2 films with large temperature coefficient of electrical resistance near room temperature
Jan Vosejpka	Advancing Cu2O Films for PEC Water Splitting Using Reactive HiPIMS: Enhanced Crystallinity and Photocurrent Performance
Akash Kumar	Deposition of Cu-Doped TiO2 using Helium-Assisted DC Magnetron Sputtering for Conductometric Hydrogen Sensing
Minh Thanh Vu	Synthesis and characterization of HiPIMS-deposited Zr–O–N films for potential water splitting applications
Jiří Belinger	Global gravitational field modelling for spheroidal planetary bodies: non-singular expressions
Tomáš Augustiňák	Reduced-order modelling of blood flow in the human arterial tree
List of posters (Cybernetics, Informatics)	
Jakub Šmíd	Cross-lingual Emotion Detection
Duc Thien Pham	SpiTranNet: A Spiking-Transformer network for Motor Imagery classification using multi-channel EEG signals
Elgun Majidov	Two Pillars of Software Project Health: DevOps and DevEx
Jan Krejčí	The Right Tracker for the Right Job: Maritime Case Study
Lukáš Kuhajda	Engineering Thermostable Proteins Using Large Language Models
Jiří Vyskočil	Towards Aesthetic Enrichment of Mirror Selfies via Automatic Image Analysis
Kateřina Wolf	Complexity of KIR allele identification pipeline design
Tomáš Lebeda	Spacial Analysis of Image Description for Detection of Cognitive Disorders
Martin Langmajer	Zero Vibration Filter Design Tool
Michal Brabec	An Analytical Design Method for Power System Stabilizers Based on Hinf Specifications
Jan Tupý	Nonsense Word Repetition for Detection of Cognitive Disorders
Jan Trejbal	Point-mass Filter with Non-equidistant Grid Design
Tomáš Honzík	Autoregressive Upscaling of Sparse Single-Cell Data Improves Interpretability
Tomáš Železný	Ablations Studies in Pose-Based Sign Language Translation
Lukáš Vladař	Using Pre-trained Models for Phoneme Representation in Czech Speech Synthesis
Tomáš Myslivec	Testing Platform for Periodic Control

Participants must be present during the poster session (10:15-12:15)

Proceedings for download: https://svk.fav.zcu.cz/download/proceedings_svk_2025.pdf