## Schedule of Open Scientific Lectures in 2025 Department of Automation, Biomechanics, and Mechatronics (K11), Room 2M334 Faculty of Mechanical Engineering of TUL

DATE	TIME	SPEAKER	LECTURE TITLE
11.March	12:00	Paweł Olejnik	Estimating the static friction law of a kinematically forced double torsion pendulum using PINNs <sup>1</sup>
18.March	12:15	Adam Wijata	Wykorzystanie narzędzi sztucznej inteligencji w pracy naukowca <sup>2</sup>
25.March	12:05	Majid Shahgholi	HOT TOPICS IN SCIENCE AND TECHNOLOGY (W1): Chaotic and Nonlinear Vibrations in Continuous Rotating Systems with Active Magnetic Bearings (AMB) <sup>1</sup>
8.April	12:15	Bartosz Stańczyk	Innowacje w druku 3D: najnowsze trendy i technologie <sup>2</sup>
15.April	12:15	Mohammad P. Rezaei	Nonlinear Hencky's Beam Model For Beam Structures <sup>1</sup>
29.April	12:15	Sayed M.M. Najafabadi	Examining the Impact of Visual Perturbation Caused by Virtual Reality on Postural Stability <sup>1</sup>
6.May	12:15	Bipin Balaram	Filippov Method for Non-Smooth Systems <sup>1</sup>
13.May	12:15	Yared D. Desta	On the Relationships Between Friction-Induced Acoustic Waves and Vibrations: A Review with an Illustrative Experiment <sup>1</sup>
20.May	12:15	Open time slot	
27.May	12:15	Paul Asir	Physics in Automation and Biomechanics <sup>1</sup>
3.June	12:15	Muhammad Umer	Challenges and Solutions in Analytical Approaches for Nonlinear Systems <sup>1</sup>
10.June	12:15	Muhammad J.U. Rehman	Nonlinear Dynamics of 2DOF Mechanical Oscillators: Interactions of Parametric Excitation and Dry Friction <sup>1</sup>
17.June	12:15	Ali Fasihi	Dynamics of Fluid Conveying Pipe <sup>1</sup>

<sup>&</sup>lt;sup>1</sup> English-language presentations will be prepared also for English-speaking guests of the department.

<sup>&</sup>lt;sup>2</sup> Polish-language presentation.