



83rd International Scientific
Conference of the
University of Latvia **2025**

**PHYSICS. EDUCATION. PRACTICE. Seminar
for University Physics Education
Practitioners**

Monday, 27 January 2025, 9:00 AM,
Zoom link: https://ej.uz/PhysEdPract_2025

Programme

Time in the programme is in Riga time zone (UTC + 2)

Chairs: Ludmila Belogradova, Jeļena Kosmača		
9:00 - 9:05	Ludmila Belogradova, Jeļena Kosmača <i>Department of Physics, Faculty of Science and Technology, University of Latvia</i>	Opening
9:05 - 9:45	Gerald Feldman <i>Department of Physics, George Washington University, Washington DC, USA</i>	Establishing a Collaborative Student-Centered Learning Environment using the SCALE-UP Pedagogy
9:45 - 10:15	Tengiz Bibilashvili <i>Physics Department and College of Creative Studies, University of California, Santa Barbara, USA</i>	Fostering Talent: Unique Approaches to Selecting, Advising, and Teaching Gifted Students at UCSB's College of Creative Studies
10:15 - 10:45	Paul Tschisgale <i>Physics Education, IPN – Leibniz Institute for Science and Mathematics Education, Kiel, Germany</i>	Leveraging AI to provide automated formative feedback for physics problem solving
10:45 - 11:10	Dirk Brockmann-Behnsen <i>Leibniz University, Hannover, Germany</i>	Students Learning on their own Initiative - the SCRUM Concept in Academic and School Teaching
11:10 - 11:30	Coffee break, discussions	

11:30 - 11:55	Jörg Nötel <i>University of Applied Sciences Merseburg, Merseburg, Germany</i>	Using <i>Tutorials</i> in physics teaching to address misconceptions
11:55 - 12:20	Tiia Rütman <i>Estonian Centre of Engineering Pedagogy, Tallinn University of Technology, Tallinn, Estonia</i>	Best practices in Pedagogical Training of Lecturers at Tallinn University of Technology
12:20 - 12:45	Ergi Bufasi <i>Interdisciplinary Centre for Educational Innovation, University of Latvia, Latvia</i>	Spatial Skills in Physics Education: Why They Matter and How to Enhance Them
12:45 - 13:10	Ģirts Zāģeris <i>Faculty of Science and Technology, University of Latvia</i>	School for Young Physicists: A Success Story of Generating Interest in Physics
13:10 - 13:20	Jeļena Kosmača, Ludmila Belogradova <i>Department of Physics, Faculty of Science and Technology, University of Latvia</i>	Blended learning with Khan Academy to improve physics teaching in secondary school
13:20 - ...	Conclusions, discussions	