

| Date  | Start Time | End Time | Session Type      | A: Presentation Title                                                                                                                                                       | A: Presenter/Speaker/Authors                                                                                        | B: Presentation Title                                                                                                                       | B: Presenter/Speaker/Authors                                                  |
|-------|------------|----------|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
|       |            |          |                   |                                                                                                                                                                             |                                                                                                                     |                                                                                                                                             |                                                                               |
| 27-05 | Wednesday  |          |                   | Walking together to the Bolek Pub & Restaurant (optional), start at 17:30                                                                                                   | Meeting Point - Main Building of WUT                                                                                | Politechniki 1 Square                                                                                                                       |                                                                               |
| 27-05 | 18:00      | 19:00    | Social Event      | Welcome Social Event / Registration                                                                                                                                         | Bolek Pub & Restaurant                                                                                              | Niepodległości 211 Avenue                                                                                                                   | <a href="https://bolekpub.waw.pl/">https://bolekpub.waw.pl/</a>               |
| 27-05 | 19:00      | 20:00    | Invited Talk      | I1: Invited Lecture: Manim in Physics Teaching                                                                                                                              | Uwe Zimmermann [Uppsala University]                                                                                 |                                                                                                                                             |                                                                               |
| 27-05 | 20:00      | 22:00    | Social Event      | Networking Reception                                                                                                                                                        | Bolek Pub & Restaurant                                                                                              |                                                                                                                                             |                                                                               |
|       |            |          |                   |                                                                                                                                                                             |                                                                                                                     |                                                                                                                                             |                                                                               |
| 28-05 | Thursday   |          |                   | Registration Desk and Morning Coffee starting at 8.15                                                                                                                       | Rektorska 4 Street                                                                                                  |                                                                                                                                             |                                                                               |
| 28-05 | 09:00      | 09:15    | Opening Session   | Conference Opening                                                                                                                                                          | AULA 1.01                                                                                                           |                                                                                                                                             |                                                                               |
| 28-05 | 09:15      | 10:00    | Plenary Lecture   | PL1: Opening Plenary Lecture: AI in STEM education: when it works, when it doesn't, and why the difference almost always comes down to instructional design                 | Katarzyna Potęga vel. Żabik [Copernicus Science Centre, Warsaw]                                                     |                                                                                                                                             |                                                                               |
| 28-05 | 10:00      | 10:20    | Oral Presentation | O17: Building interactive physics simulations without writing code: the promise and the perils of AI-assisted “vibe coding”                                                 | Dariusz Aksamit                                                                                                     |                                                                                                                                             |                                                                               |
|       |            |          |                   | PATH A (AI): room 4.01 [4th floor]                                                                                                                                          |                                                                                                                     | PATH B (TECH ED): room 4.04 [4th floor]                                                                                                     |                                                                               |
| 28-05 | 10:40      | 11:00    | Oral Presentation | O1: Students’ and teachers’ perspectives on graded pre-class assignments in the age of artificial intelligence                                                              | Arjan Lock, Ruth Buning, Johan Van Der Tol                                                                          | O6: Effectiveness of whiteboards as a collaboration tool in university physics teaching: investigations based on the ICAP framework         | Silke Stanzel, Christine Lux, Claudia Schäfle                                 |
| 28-05 | 11:00      | 11:20    | Oral Presentation | O2: Continuous examination in the age of AI: comparing “explainer videos” and two-stage exams                                                                               | David Marsh                                                                                                         | O7: What is physics? – Socratic roots and experiential learning                                                                             | Hendrik Snijder                                                               |
| 28-05 | 11:20      | 11:40    | Oral Presentation | O4: AI-supported pre-class preparation to enhance inquiry-based physics learning in engineering education                                                                   | Debjani Goswami                                                                                                     | O9: Evaluation of active learning materials for engineering students in fluid dynamics: progress and difficulties addressing misconceptions | Max Uzulis, Christian Kautz                                                   |
| 28-05 | 11:40      | 12:00    | Oral Presentation | O5: AI-supported mechanistic reasoning in physics education: investigating students' explanations of core electrostatic concepts in a neuron axon – RC circuit mode         | Aslihan Muazzez Ünsal, Fatma Caner                                                                                  | O10: Guided inquiry-based physics labs for future engineers                                                                                 | Yuki Kaneko                                                                   |
| 28-05 | 12:00      | 12:45    | Lunch Break       | Lunch Break                                                                                                                                                                 | Rektorska 4 Street - lobby                                                                                          |                                                                                                                                             |                                                                               |
| 28-05 | 12:45      | 14:00    | Poster Session    | Poster Session (both paths): lobby [ground floor]                                                                                                                           |                                                                                                                     |                                                                                                                                             |                                                                               |
| 28-05 | 14:00      | 15:30    | Workshop          | W1: Manim in Physics Teaching 1 [4.08]                                                                                                                                      | Uwe Zimmermann                                                                                                      | W2: Designing effective learning processes in physics with the ICAP-model for active learning[4.01]                                         | Claudia Schäfle, Silke Stanzel                                                |
| 28-05 | 15:30      | 16:00    | Coffee Break      | Coffee Break                                                                                                                                                                |                                                                                                                     |                                                                                                                                             |                                                                               |
| 28-05 | 16:00      | 17:30    | Workshop          | W3: Creating a student-centered collaborative learning environment in a university physics classroom [4.01]                                                                 | Gerald Feldman                                                                                                      | W4: Sensors, micro-Controllers: How do they connect [4.08]                                                                                  | Derek Land, Thomas Triemstra                                                  |
| 28-05 | 19:00      | 21:00    | Social Event      | Conference dinner                                                                                                                                                           | Stary Dom - Polish Restaurant                                                                                       | Puławska 104/ 106 Street                                                                                                                    | <a href="https://restauracjastarydom.pl/">https://restauracjastarydom.pl/</a> |
|       |            |          |                   |                                                                                                                                                                             |                                                                                                                     |                                                                                                                                             |                                                                               |
| 29-05 | Friday     |          |                   | Registration Desk and Morning Coffee starting at 8.30                                                                                                                       | Rektorska 4 Street                                                                                                  |                                                                                                                                             |                                                                               |
| 29-05 | 09:00      | 09:40    | Invited Talk      | I2: Invited Lecture: From Engineering Physics to Student Innovation: Large-Scale Project-Based Learning at Polytech Nantes [4.07]                                           | Thomas Lepetit [University of Nantes]                                                                               |                                                                                                                                             |                                                                               |
|       |            |          |                   | PATH A [4.07]                                                                                                                                                               |                                                                                                                     | PATH B [4.05]                                                                                                                               |                                                                               |
| 29-05 | 09:40      | 10:00    | Oral Presentation | O12: The realization and opportunities of an educational cleanroom for engineering trainings and high-tech projects in close collaboration with the semiconductor ecosystem | Jeroen B. Oostinga                                                                                                  | O14: Critical making in STEM teacher education: conceptual foundations and insights from professional development                           | Sara Durski, Holger Weitznel, Wolfgang Müller                                 |
| 29-05 | 10:00      | 10:20    | Oral Presentation | O13: International Particle Physics Masterclasses                                                                                                                           | Małgorzata Janik, Łukasz Graczykowski                                                                               | O15: Quantum Edukit: An experimental toolkit to learn quantum mechanics                                                                     | Nishant Dogra                                                                 |
| 29-05 | 10:20      | 10:40    |                   |                                                                                                                                                                             |                                                                                                                     | O16: Video analysis and dynamic modeling of rotation motion using tracker                                                                   | Jozef Kúdelčík, Peter Hockicko, Mária Kúdelčíková                             |
| 29-05 | 10:50      | 12:25    | Workshop          | W5: Manim in Physics Teaching 2 [4.08]                                                                                                                                      | Uwe Zimmermann                                                                                                      | W6: Using research-based instructional materials to foster conceptual understanding: tutorials in introductory physics [4.07]               | Christian Kautz, Max Uzulis and Silke Stanzel                                 |
| 29-05 | 12:30      | 13:30    | Lunch Break       | Lunch Break                                                                                                                                                                 | Rektorska 4 Street - lobby                                                                                          |                                                                                                                                             |                                                                               |
| 29-05 | 13:30      | 15:00    | Workshop          | W7: Hands-on critical making: addressing disinformation through STEM makerspaces [4.07]                                                                                     | Sara Durski, Holger Weitzel, Wolfgang Müller, Katarzyna Rutkowska, Mirosław Brzozowy, Flavio Renga, Laura Farinetti | Networking / Visiting WUT                                                                                                                   |                                                                               |
| 29-05 | 15:00      | 15:30    | Meeting           | SIG Physics Meeting [4.08]                                                                                                                                                  | Networking / Visiting WUT                                                                                           |                                                                                                                                             |                                                                               |
| 29-05 | 15:30      | 16:00    | Closing Session   | Summary and Conference Closing [4.04]                                                                                                                                       |                                                                                                                     |                                                                                                                                             |                                                                               |

4.02

facilities, participants' own work, networking

4.04

facilities, participants' own work, networking