

4th World Conference on Physics Education 2024, Kraków, Poland

Monday 26 August 2024

Oral presentations: CPE-1. Competence-based physics education - Medium Lecture Hall A (13:00 - 14:00)

-Conveners: Aleš Mohorič

time	[id] title	presenter
13:00	[259] Identifying student interpretations of quantum mechanics in upper tertiary education	OCKHORST, Rutger
13:20	[243] Boosting Problem-Solving Skills in Physics Classes: Conceptual Understanding Through Context-Rich Problems	DOMENICHINI, diana
13:40	[30] Student-centred reform of an Applied physics program	Prof. MOHORIČ, Aleš

Oral presentations: EPW-1. Experiments and Practical Work in Physics Education - Medium Lecture Hall B (13:00 - 14:00)

-Conveners: Giovanni Organtini

time	[id] title	presenter
13:00	[236] Story Games as a Stimulus for Experimental Activity	SUKELOVÁ, Tatiana
13:20	[72] Teaching Thinking-Back-and-Forth in Practical Work: an Educational Design Study in Secondary Education	SPAAN, Wouter
13:40	[66] Design for Physics	ORGANTINI, Giovanni

Oral presentations: H-1. HYBRID 1 - Large Lecture Hall A (13:00 - 14:00)

time	[id] title	presenter
13:00	[29] A quantum mechanics educational proposal implemented in the INSPYRE School	POSTIGLIONE, Adriana
13:20	[50] Cultural understanding of quantum physics through a historical and pedagogical reconstruction of Old Quantum Theory and early Quantum Mechanics	LOVISETTI, Luisa

Oral presentations: MDR-1. Contemporary Physics, Modern Physics in Schools and Universities - Exhibition Room A (13:00 - 14:00)

-Conveners: Efraim Yehuda Weissman

time	[id] title	presenter
13:00	[262] From probabilities to Bell's inequalities: a pathway for secondary school quantum literacy	DE RENZI, Valentina
13:20	[49] A new teaching-learning sequence of quantum physics via Michelson interferometer using the Dirac notation	TÓTH, Kristóf
13:40	[22] Keep it secret, keep it safe: Teaching quantum cryptography in high-school	WEISSMAN, Efraim Yehuda

Oral presentations: PTE-1. Physics Teacher Education and Professional Learning - Conference Room (13:00 - 14:00)**-Conveners: Stefano Rini**

time	[id] title	presenter
13:00	[169] Provincial physics competition as a tool for reflection on physics competences in Polish primary schools – case study	MLYNCZYK, Marta
13:20	[242] Designing a Tinkering Workshop: Empowering Teachers Demystifying the Design Process	RICCIARDI, Sara
13:40	[253] Tinkering in the primary school: from episode to science practice	RINI, Stefano

Oral presentations: PTE-2. Physics Teacher Education and Professional Learning - Exhibition Room B (13:00 - 14:00)**-Conveners: Olga Gkioka**

time	[id] title	presenter
13:00	[205] Professional Development Programs in Physics in Tuscany	MARIOTTI, EMILIO
13:20	[270] Evaluating in-service teachers pedagogical content knowledge for teaching physics	GAMMELL, Stephen
13:40	[195] Pre-service physics teachers' understanding of rates of change in the context of the undergraduate laboratory work	GKIOKA, Olga

Oral presentations: TLP-1. Teaching and Learning Physics Concepts - Small Hall (13:00 - 14:00)**-Conveners: Florian Budimaier**

time	[id] title	presenter
13:00	[133] Perceptions of high school learners' difficulty with kinematics graphs	Mr PHAGE, Itumeleng
13:20	[119] IPER 2022 – A study conference on Physics Education Research in Italy	GILIBERTI, Marco
13:40	[21] Evaluation of a teaching-learning sequence on the particulate nature of matter using crystal structures	BUDIMAIER, Florian

Oral presentations: TLP-2. Teaching and Learning Physics Concepts - Large Lecture Hall B (13:00 - 14:00)**-Conveners: Tetyana Antimirova**

time	[id] title	presenter
13:00	[212] Preservice Physics Teachers' Challenges in Laboratory Practice	Ms GEZER, İrem
13:20	[260] Innovative teaching methods used by the employees of the University of Wrocław – case study from the perspective of Faculty of Physics and Astronomy	GRECZYŁO, Tomasz
13:40	[126] Case Studies in Introductory Physics Course for Science Programs: Example of Intervention	ANTIMIROVA, Tetyana

Oral presentations: CUR-1. Physics Curricula - Medium Lecture Hall A (16:30 - 17:30)**-Conveners: Vojtěch Žák**

time	[id] title	presenter
16:30	[266] Walk of the Planets - Students Concepts of the Solar System	LOCH, Maximilian Alexander
16:50	[251] What criteria should science textbooks meet?	FÜRSTOVÁ, Tereza

17:10	[65] A case of four groups of stakeholders: Do we want the same physics curriculum?	ŽÁK, Vojtěch
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Oral presentations: EAD-1. Evaluation and Assessment of Student Learning and Development - Conference Room
(16:30 - 17:30)

-Conveners: Mirosława Sajka

time	[id] title	presenter
16:30	[305] Exam in primary school in form of practical open tasks	KALDAN, Mikołaj
16:50	[287] Affordances of learning engagement using 'MUCBCS' strategy	Dr DJAN, GRACE
17:10	[247] Towards overcoming students' difficulties in understanding graphs	SAJKA, Mirosława

Oral presentations: H-2. HYBRID 2 - Large Lecture Hall A (16:30 - 17:50)

time	[id] title	presenter
16:30	[285] Art analysis, the Photoelectric Effect and the Electromagnetic spectrum in a Physics class	Ms SAAVEDRA, Brenda lxcuiname
16:50	[298] When Physics Hurts: how to make learning more memorable	CLINKINGBEARD, Caleb
17:10	[109] Promoting critical, creative, and caring thinking skills within the context of environmental issues	ZWEIFEL, Marie MEISSNER, Celina
17:30	[231] A scheduled teaching intervention for Newton's Disc, programmable with Scratch, for teaching and learning Optics	GKIOLMAS, Aristotelis

Oral presentations: MMP-1. Multimedia, AR, VR and AI in Physics Education - Medium Lecture Hall B (16:30 - 17:30)

-Conveners: Andreas Redfors

time	[id] title	presenter
16:30	[96] Augmented Reality used in physics experiments – Increase pupils interest and reduce the cognitive load?	SCHWANKE, Hagen
16:50	[271] Finding connections between physical concepts by playing the game Physics Codenames	JANIGA, Ladislav
17:10	[16] Early Years Physics and Children's Production of Tablet Videos in Preschool	Prof. REDFORS, Andreas

Oral presentations: PTE-3. Physics Teacher Education and Professional Learning - Large Lecture Hall B (16:30 - 17:30)

-Conveners: Eilish McLoughlin

time	[id] title	presenter
16:30	[288] Fighting climate change by doing a practitioner inquiry	PEETERS, Wim
16:50	[104] The Mentor Learns the Most: The Effects of Curiosity-Driven Discourse on Physics Mentors	JUTKOWITZ, Roni
17:10	[279] Embracing an inquiry stance in physics teacher professional learning	Dr MCLOUGHLIN, Eilish

Oral presentations: PTE-4. Physics Teacher Education and Professional Learning - Exhibition Room A (16:30 - 17:30)

-Conveners: Andreja Šarlah

time	[id] title	presenter
16:30	[103] Issues in international physics education – 1980s	ZOLLMAN, Dean
16:50	[13] Methodological skills of in-service physics teachers after a research-based learning course	CAMPOS, Esmeralda
17:10	[53] How experienced faculty change their teaching practices to fit into reformed courses	ŠARLAH, Andreja

Oral presentations: TLP-3. Teaching and Learning Physics Concepts - Exhibition Room B (16:30 - 17:30)

-Conveners: Kübra Özmen

time	[id] title	presenter
16:30	[183] Approaching astronomy at nursery school: a reflection on teaching practices and student learning	HAMDANI - BENNOUR, Soria
16:50	[228] An advanced form of NetLogo's Forest Fire model: A teaching approach for Primary School students, regarding Complex Systems	BENISI, Aikaterini
17:10	[224] The Use of Visual Representations for Light and Sound Topics in Science Textbooks: A Cross-Cultural Study	ÖZMEN, Kübra

Oral presentations: TLP-4. Teaching and Learning Physics Concepts - Small Hall (16:30 - 17:30)

-Conveners: Marianne Korner

time	[id] title	presenter
16:30	[98] Student Understanding of Divergence and Curl	TOPDEMIR, Zeynep
16:50	[38] How do undergraduate students understand the displacement current and apply Ampère-Maxwell's law?	MARTI, Arturo
17:10	[210] Teaching Electromagnetic Radiation with Cross-Age Peer Tutoring	KORNER, Marianne

Tuesday 27 August 2024

Oral presentations: EPW-2. Experiments and Practical Work in Physics Education - Large Lecture Hall B (10:30 - 11:30)

-Conveners: Lars-Jochen Thoms

time	[id] title	presenter
10:30	[62] Astronomical observations: A non-formal and itinerant approach for Physics and Astronomy teaching	DA COSTA JUNIOR, Edio
10:50	[265] Knowledge and evidence over fear of invisible radiation via practically oriented teaching with a particle camera instrument	Dr HOLIK, Michael
11:10	[264] Physics for non-physicists - A scientific propaedeutic for prospective medical students	Dr THOMS, Lars-Jochen

Oral presentations: H-3. HYBRID 3 - Large Lecture Hall A (10:30 - 11:30)

time	[id] title	presenter
10:30	[37] Physics teachers' professional development: longitudinal training for building coherent curricula across grades	BOLOGNA, Valentina
10:50	[158] Developing an Understanding of Inertia through Hands-on Activities: Emphasizing Meaning over Rote Memorization	YILMAZ SENEM, Beril
11:10	[206] The Training Needs of Physics Teachers: a Challenge from the Association for Physics Teaching	MONTALBANO, Vera

Oral presentations: IBP-1. Identity and Belonging in Physics - Exhibition Room A (10:30 - 11:30)

-Conveners: Marika Kapanadze

time	[id] title	presenter
10:30	[115] Science Identity Development in Early Physics and Chemistry Classes: A Longitudinal Study	BUB, Frederik
10:50	[240] The Relationship Between High School Students' Sense of Belonging to Physics, Physics Identity, and Physics Achievement	Mrs BIÇMEN ŞENOL, Merve Düriye
11:10	[24] Students' Interest in Physics – Study Results from Georgia	Prof. KAPANADZE, Marika

Oral presentations: PSI-1. Physics for Environment and Social issues - Conference Room (10:30 - 11:30)

-Conveners: Kristel Uiboupin

time	[id] title	presenter
10:30	[9] Improving socio-scientific reasoning through field-trips	BÖNING, Paul
10:50	[129] The role of uncertainty in developing sustainable futures scenarios	MIANI, Lorenzo
11:10	[255] Weather Literacy: Assessing Third-Grade Students' Knowledge and Skills related to weather	UIBOUPIN, Kristel

Oral presentations: PTE-5. Physics Teacher Education and Professional Learning - Medium Lecture Hall A (10:30 - 11:30)

-Conveners: Ioannis Lefkos

time	[id] title	presenter
10:30	[269] The use of games in physics teaching	KOZÁNEK KISS, Tünde
10:50	[211] Challenges of Pre-service Physics Teachers in Implementing Authentic Argument Driven Inquiry (AADI): A Three-Phase Study	DEMIRTAŞ, Dilber
11:10	[278] Greek Science Teachers' Views about the Use of Educational Simulations in their Practice	Dr LEFKOS, Ioannis

Oral presentations: PTE-6. Physics Teacher Education and Professional Learning - Small Hall (10:30 - 11:30)**-Conveners: Markus Obczovsky**

time	[id] title	presenter
10:30	[235] Critical review of literature resources on the use of Arduino and smartphones in physics education: a first result of the ADELANTE project	GABELLI, Lucia
10:50	[71] Investigating the Role of Mathematics for Learning Quantum Physics	FÖRSTER, Moritz
11:10	[93] A scheme to support preservice physics teacher in analysing curriculum materials	OBCZOVSKY, Markus

Oral presentations: TLP-5. Teaching and Learning Physics Concepts - Exhibition Room B (10:30 - 11:30)**-Conveners: Mieke De Cock**

time	[id] title	presenter
10:30	[226] Analysis of physics textbooks presenting electromagnetic waves at upper secondary level	Mr CATENA, Danilo
10:50	[229] Flipped classroom: Effects on the conceptual understanding in electric circuit teaching	LUTZ, Wolfgang
11:10	[155] Investigating students' insight after attending an optimized research-based planetarium presentation about the apparent motion of the Sun and stars	DE COCK, Mieke

Oral presentations: TLP-6. Teaching and Learning Physics Concepts - Medium Lecture Hall B (10:30 - 11:30)**-Conveners: Federico Corni**

time	[id] title	presenter
10:30	[198] Intensive and extensive properties as a crosscutting idea: the case of teaching density	Dr JOUBRAN, Fadeel
10:50	[283] Cultivating students' reading and communication skills in Physics	RISSANEN, Antti
11:10	[232] Imaginative Embodied Forms of Expression in Macroscopic Physics for K-6 Teacher Education	CORNI, Federico

Oral presentations: EAD-2. Evaluation and Assessment of Student Learning and Development - Large Lecture Hall B (15:30 - 16:50)**-Conveners: Jun-ichiro Yasuda**

time	[id] title	presenter
15:30	[277] The Rasch model in the role of assessing the characteristics of the group of students on the physics knowledge test	ŠTIBI, Ivana

15:50	[150] Preliminary Investigation of Validating Chain Computer Adaptive Testing Based on the Force Concept Inventory	UEMATSU, Haruko
16:10	[222] Comparing prior knowledge of first-semester physics students between the cohorts of 2013 and 2023	GAHRMANN, Dennys
16:30	[61] A feasibility study to develop chain computerized adaptive testing for the Force Concept Inventory	Dr YASUDA, Jun-ichiro

Oral presentations: H-4. HYBRID 4 - Large Lecture Hall A (15:30 - 16:50)

time	[id] title	presenter
15:30	[121] Design and trialling of an educational sequence on surface phenomena for university students	Dr GRAZIA, Ilaria
15:50	[64] Interplay between identity and agency in the context of physics education in Turkey: Case study.	ŞENGÜL, Özden
16:10	[146] Strengthening of scientific skills from the STEM approach in fifth grade	VIRGUEZ LAMPREA, Kilian Ferney
16:30	[5] Effect of the group size on student learning using an active learning methodology in a science class	PAZMINO, Arturo

Oral presentations: MDR-2. Contemporary Physics, Modern Physics in Schools and Universities - Medium Lecture Hall A (15:30 - 16:50)

-Conveners: Marco Di Mauro

time	[id] title	presenter
15:30	[105] What is so difficult in quantum physics? Diagnosing high school students' difficulties in quantum physics	GOLTZMAN, Alexandra
15:50	[178] Visualising the Invisible: Reviewing the Literature on Demonstration Material for Quantum Entanglement	FOLKERS, Bart
16:10	[145] Investigating the Beliefs of Experts and of Teachers on Teaching Quantum Physics at Secondary Schools	DI MAURO, Marco
16:30	[307] Elementary particles in an introductory course on quantum mechanics	Dr MELO, Ivan

Oral presentations: MDR-3. Contemporary Physics, Modern Physics in Schools and Universities - Small Hall (15:30 - 16:50)

-Conveners: Fabian Hennig

time	[id] title	presenter
15:30	[194] The addition of an interdisciplinary approach for holistic learning	MIHELAK, Lucija
15:50	[162] Different spins on the two-state paramagnet: Pedagogical advantages and considerations	KOERFER, Ebba
16:10	[102] 'Seeing quantum' in a water droplet: On the theoretical development of an experimentally-backed educational analogy	KILDE LÖFGREN, Sebastian
16:30	[42] From Quantum Optical Experiment to Description Using Dirac Notation in Physics Classrooms - Results of an Acceptance Survey	HENNIG, Fabian

Oral presentations: MMP-2. Multimedia, AR, VR and AI in Physics Education - Medium Lecture Hall B (15:30 - 16:50)

-Conveners: Ivana Poljančić Beljan

time	[id] title	presenter
15:30	[94] The influence of using TikTok as a learning tool on grade 8 learners' understanding of static electricity	VAN DER MERWE, Mari-Louise
15:50	[324] STEM Education: A Remote Laboratory Implementation in Physics Courses	CLAESSON, Lena
16:10	[258] Supporting Conceptual Understanding of the Electric Potential and the Electric Field using Virtual Reality	SCHMID, Roman
16:30	[181] The digital repository for physics and science teaching	POLJANČIĆ BELJAN, Ivana

Oral presentations: MMP-3. Multimedia, AR, VR and AI in Physics Education - Exhibition Room A (15:30 - 16:50)

-Conveners: Zdeňka Koupilová

time	[id] title	presenter
15:30	[128] Teaching vignettes for working with Arduino in science teacher education	BERNSTEINER, Angelika
15:50	[10] Differential Impact of Science Instruction on Paranormal Beliefs Among College Students: A Three-Semester Investigation	BASIR, Mo
16:10	[43] Virtual reality in astronomy education: reflecting on design principles through a dialogue between researchers and practitioners	BONDELL, Jackie
16:30	[308] Approaching Quantum Technologies for Secondary School Students and Their Teachers	KOUPILOVÁ, Zdeňka

Oral presentations: OUT-1. Outreach of Physics - Conference Room (15:30 - 16:30)

-Conveners: Jan Sermeus

time	[id] title	presenter
15:30	[106] STEM researchers' practices for public trust enhancement	KOKOLAKI, Athanasia
15:50	[309] Nuclear astrophysics masterclasses as an interest-promoting learning environment	NITSCHKE, Hannes
16:10	[148] Communicating Uncertainty in a Planetarium	SERMEUS, Jan

Oral presentations: STM-1. Physics in STEM Education and Interdisciplinary Approaches - Exhibition Room B (15:30 - 16:50)

-Conveners: Matteo Tuveri

time	[id] title	presenter
15:30	[26] Physics of the Earth in introductory geosciences: an exploration of interdisciplinarity	DUNNETT, Kirsty
15:50	[68] A New Sequence Model of Interdisciplinary STEM Learning: From Theory to Practice	Dr CONNELL, MARINA
16:10	[317] Inverse Problems and Nonlinear Optimization for Inquiry-based STEM Education Using Open Data Science Tools	BOROVSKÝ, Dominik
16:30	[54] Interdisciplinary approaches to foster the learning of contemporary physics topics at high school	Dr TUVERI, Matteo

Wednesday 28 August 2024

Oral presentations: EAD-3. Evaluation and Assessment of Student Learning and Development - Conference Room (10:30 - 11:30)

-Conveners: Lana Ivanjek

time	[id] title	presenter
10:30	[123] A didactic pathway on the concept of energy in primary school: cognitive well-being and self-efficacy based on gender	GIARRATANO, Giusy
10:50	[216] Studying the relationship between performance and confidence in physics and mathematics	LIPPIELLO, Stefania
11:10	[143] Does inquiry-based teaching make a difference? Results of the research project on wave optics (INVESTIGATE)	IVANJEK, Lana

Oral presentations: EPW-3. Experiments and Practical Work in Physics Education - Exhibition Room A (10:30 - 11:30)

-Conveners: Shirish Pathare

time	[id] title	presenter
10:30	[73] Enhancing Student Engagement in a Measurement and Control Laboratory Course: Design Strategies and Implementation	KACZMAREK, Mirela
10:50	[153] Redesigning a lab for engineering students using virtual and face to face activities	STARI, Cecilia
11:10	[219] Online Laboratory – Equipped with Procedural understanding Perspective	PATHARE, Shirish

Oral presentations: IBP-2. Identity and Belonging in Physics - Medium Lecture Hall A (10:30 - 11:30)

-Conveners: Meagan Sundstrom

time	[id] title	presenter
10:30	[12] What correlates with persistence of undergraduate women?	FRANKLIN, Maxwell
10:50	[56] Gatekeepers: The Role of Physics Teachers in Latino Women's Physics Identity Development	LUCERO, Rocío
11:10	[14] Bias in peer recognition does not explain differences in how men and women perceive their recognition in physics courses	SUNDSTROM, Meagan

Oral presentations: PSI-2. Physics for Environment and Social issues - Medium Lecture Hall B (10:30 - 11:30)

-Conveners: Dimitris Stavrou

time	[id] title	presenter
10:30	[203] Orienting the young in the complexity of climate change to foster agency and decision-making in societally relevant choices	TASQUIER, Giulia
10:50	[91] Design of a narrative approach for teaching/learning uncertainty in Climate Change Education	D'ORTO, Emma
11:10	[227] Pedagogical Model for Teacher Education on Climate Change	LEVRINI, Olivia

Oral presentations: PTE-7. Physics Teacher Education and Professional Learning - Small Hall (10:30 - 11:30)

-Conveners: Deepa Chari

time	[id] title	presenter
10:30	[147] In-field and out-of-field teachers' integration of a Massive Open Online Course in kinematics into their instruction of physics	KAPON, Shulamit
10:50	[127] Teachers TPACK: promoting self-monitoring in physics problem solving through digital activities	OFIR, kana
11:10	[67] Voluntary online content discussion seminars as potential avenues of teacher communities of practice	CHARI, Deepa

Oral presentations: PTE-8. Physics Teacher Education and Professional Learning - Large Lecture Hall B (10:30 - 11:30)**-Conveners: Gesche Pospiech**

time	[id] title	presenter
10:30	[176] Classroom network analysis for pedagogical decision-making in Physics and Science Education	PULGAR NEIRA, Javier Alejandro
10:50	[80] Pro-environmental Characterization attitudes of natural sciences and physics teachers in training	BECERRA RODRIGUEZ, Diego Fernando
11:10	[23] Quantum Technology as Occupational Field: Twofold Practice in Physics Teacher Preparation	POSPIECH, Gesche

Oral presentations: T-1. TEACHER SESSION 1 - Seminar Room (10:30 - 11:30)**-Conveners: Wim Peeters**

time	[id] title	presenter
10:30	[320] SARA BARBIER AWARD "Be like Izaak Newton" - science project as a method of introducing students with special educational needs to work in a new class on the first year of secondary school during physics lessons	BIEL-KIEPURA, Joanna
10:50	[326] IBL on physics lessons ... in the eyes of students	SZYMURA, Malgorzata
11:10	[328] How does the use of one's own notes during tests affect students' performance in physics?	BEKAS, Anna

Oral presentations: TLP-7. Teaching and Learning Physics Concepts - Exhibition Room B (10:30 - 11:30)**-Conveners: Ana Susac**

time	[id] title	presenter
10:30	[201] Embracing Complexity – Computational Essays in Fostering Authentic Scientific Reasoning	VETELI, Peitsa
10:50	[11] Making Teaching Physics Cultural – a New Paradigm and its Application in a Summary Lecture	GALILI, Igal
11:10	[237] How challenging is it to extract information from different representations	SUSAC, Ana

Thursday 29 August 2024

Oral presentations: CPE-2. Competence-based physics education - Medium Lecture Hall A (10:30 - 11:30)

-Conveners: Jesper Bruun

time	[id] title	presenter
10:30	[118] The Influence of Using an Arduino-supported Project Book on the Development of Knowledge and Attitude towards Physics	DOROTTYA, Schnider
10:50	[88] Students change in attitudes towards group work: A case study of the ISLE-based reform	MAHNE, Nastja
11:10	[1] Network analysis to discover and characterise student responses to a conceptual survey about refraction	BRUUN, Jesper

Oral presentations: EAD-4. Evaluation and Assessment of Student Learning and Development - Small Hall (10:30 - 11:30)

-Conveners: Martina Kekule

time	[id] title	presenter
10:30	[141] The first results from the TIMSS Advanced 1995 specialized physics test repeated among Czech gymnasium students in 2023	Ms PSCHOTNEROVÁ, Petra
10:50	[117] Assessing students' understanding of computational modelling in physics	Mr BOOT, Roeland
11:10	[274] Analysis of students' eye movements during solving multiple-choice scientific literacy test	KEKULE, Martina

Oral presentations: EPW-4. Experiments and Practical Work in Physics Education - Medium Lecture Hall B (10:30 - 11:30)

-Conveners: MARINA CARPINETI

time	[id] title	presenter
10:30	[33] Air-source heat pumps in the secondary physics laboratory	COTTLE, Daniel
10:50	[275] Absolute zero: An upper-secondary acoustic levitation lab	JOHANSSON, Andreas
11:10	[116] An oscillating Cartesian diver to study pressure in fluids	CARPINETI, Marina

Oral presentations: EPW-5. Experiments and Practical Work in Physics Education - Exhibition Room A (10:30 - 11:30)

-Conveners: Marta Carli

time	[id] title	presenter
10:30	[167] Exploring the non-linear viscoelastic properties of a mass-rubber band oscillator	BATTAGLIA, Onofrio Rosario
10:50	[180] Latvian students' perceptions of experimental physics: insights from E-CLASS survey	CINĪTE, Ilva
11:10	[215] A department-wide study on the development of students' attitudes toward experimental physics: setting the groundwork for innovation	Dr CARLI, Marta

Oral presentations: H-5. HYBRID 5 - Large Lecture Hall A (10:30 - 11:30)

time	[id] title	presenter
10:30	[314] Conceptualisation and quantitative study of aesthetic and affective Perception of Pictures in Physics Education	ZÄHRINGER, Tatjana
10:50	[177] Study on the difficulties in learning fundamental concepts of thermodynamics in the initial training of physics teachers: the case of analogical scientific reasoning	TORRES VALOIS, TARCIOLO
11:10	[186] DPFS: Italian national survey on the perception of scientific practice among primary school children	BOZZO, Giacomo

Oral presentations: IBP-3. Identity and Belonging in Physics - Large Lecture Hall B (10:30 - 11:30)

-Conveners: Italo Testa

time	[id] title	presenter
10:30	[120] Validation of a Science Adapted Identity Model	CHRIST, Lisa-Marie
10:50	[130] Praxis of designing an inclusive science curriculum: acoustics within teacher education for and with Peasants and Deaf persons	RIBEIRO GOMES, Danila
11:10	[170] Exploring the Relationships between Physics Identity and Endorsement of Stereotyped views of Physics of STEM Undergraduate Students	TESTA, Italo

Oral presentations: PTE-9. Physics Teacher Education and Professional Learning - Exhibition Room B (10:30 - 11:30)

-Conveners: Karen Matsler

time	[id] title	presenter
10:30	[257] The Quantum for All Project: Professional Development Model and Teacher Outcomes	LOPEZ, Ramon
10:50	[297] How to evaluate students' answers and build on them? – the workshop for physics teachers	DODLEK, Danijela
11:10	[261] The Quantum for All Project: Student Outcomes and Connections to Teacher Professional Development	MATSLER, Karen

Oral presentations: T-2. TEACHER SESSION 2 - Seminar Room (10:30 - 11:30)

-Conveners: Wim Peeters

time	[id] title	presenter
10:30	[325] Watts up?: In which creative ways can you collect assessment points?	MARIS, Katleen
10:50	[319] How the implementation of the IBL method in the second grade of high school can help my students to overcome the fear of experimenting on physics lessons	BIEL-KIEPURA, Joanna
11:10	[329] Quantum Light Dimmer	SZCZEPANIAK, Dobromiła

Oral presentations: TLP-8. Teaching and Learning Physics Concepts - Conference Room (10:30 - 11:30)

-Conveners: Giulia Termini

time	[id] title	presenter
10:30	[52] Introduction of an IBT approach for nuclear physics education in high schools: a case study	Mr TERUZZI, Paolo

10:50	[144] The right way to introduce complex numbers in damped harmonic oscillators	FREERICKS, James
11:10	[122] Qualitative analysis of students' learning processes emerging from the trialling of a physics teaching/learning sequence	TERMINI, Giulia

Friday 30 August 2024

Oral presentations: EAD-5. Evaluation and Assessment of Student Learning and Development - Medium Lecture Hall A (11:30 - 13:00)

-Conveners: Elizabeth Angstmann

time	[id] title	presenter
11:30	[78] Teaching a Quantum Physics Class Using a Student-Centered Collaborative Learning Approach at the University Level	FELDMAN, Gerald
11:50	[87] Development and transferability of scientific abilities in an ISLE-based lab course	FALETIC, Sergej
12:10	[303] Understanding how students recognize and connect mathematics ideas in physics contexts: A pilot study	ROSEN, Drew
12:30	[20] Moving forward with assessment: Are marks necessary? Is there an authentic alternative for introductory courses?	ANGSTMANN, Elizabeth

Oral presentations: H-6. HYBRID 6 - Large Lecture Hall A (11:30 - 13:00)

time	[id] title	presenter
11:30	[267] Sophisticated scientific reasoning process in five-year-old children using ISLE-based activities	LEBAN, Simon Peter
11:50	[131] Research on conceptual understanding of thermodynamic and transport phenomena of solids - microscopic models of electrical and thermal conductivity	Mrs JELOVICA, Lejla
12:10	[172] Self-Guided Learning in Quantum Technologies: Unveiling the Role of Grassroots Organizations in Education and Outreach	SCHMIDT, Adrian
12:30	[82] A measure of motivation in an online astronomy course	JACKSON, Kate

Oral presentations: MDR-4. Contemporary Physics, Modern Physics in Schools and Universities - Medium Lecture Hall B (11:30 - 13:00)

-Conveners: Marco Giliberti

time	[id] title	presenter
11:30	[95] Comparing the two quantum revolutions: development of a teaching module to value their cultural and conceptual scope	SATANASSI, Sara
11:50	[151] The effect on the perception of quantum science and technology with secondary school students through a university-based quantum lab and game experience	ROVERS, Brenda Mr THIJSEN, Michiel
12:10	[74] New horizons: A quantum physics concept for grade 9 students	ALBERT, Carsten
12:30	[51] Multiple representations for Quantum Mechanics	GILIBERTI, Marco

Oral presentations: MMP-4. Multimedia, AR, VR and AI in Physics Education - Small Hall (11:30 - 13:00)

-Conveners: Will Yeadon

time	[id] title	presenter
11:30	[100] Practical evaluation of the possibilities of integrating Large Language Models in physics laboratory instruction	BABAYEVA, Marina

11:50	[164] Prompt engineering techniques to enhance Large Language Models' performance in introductory physics	Ms POLVERINI, Giulia
12:10	[90] Prospective physics teachers' perceptions and evaluations of ChatGPT in didactical tasks	Dr SADIDI, Farahnaz PRESTEL, Thomas
12:30	[200] Physics Assessment in the age of AI	YEADON, Will

Oral presentations: OUT-2. Outreach of Physics - Conference Room (11:30 - 12:30)

-Conveners: Maurizio Dabbicco

time	[id] title	presenter
11:30	[55] From school to research: a problem-solving activity to engage high school students in STEM	STERI, Arianna
11:50	[204] Expanding physics education understanding through large-scale literature review using unsupervised natural language processing	Dr CARAMASCHI, Martina
12:10	[248] Short-course on Communicating Science: Outcome of a Five-years Experience	DABBICCO, Maurizio

Oral presentations: STM-2. Physics in STEM Education and Interdisciplinary Approaches - Seminar Room (11:30 - 12:30)

-Conveners: Francesca Monti

time	[id] title	presenter
11:30	[110] A hands-on STEM project on the drought in Spain: The impact on scientific and green skills of Dutch high school students	BAARS, Cathy
11:50	[99] Augmented Reality in Electromagnetism: Which representations best support students' understanding?	STEINMACHER, Bermann
12:10	[76] Motivational and didactic efficacy of an interdisciplinary learning path on IR Reflectography and False Colour imaging of artworks	MONTI, Francesca