



FORUM CONFERENCE

15-17 April 2024

15 April 2024

9.30 Inauguration

Faculty of Physics, Auditorium im. Prof. Kielicha

Agnieszka Ludwików

9.35 Keynote 1

Chair: Karolina Lewińska

Witold Szczuciński *The Present is the Key to the Past – the Past is the Key to the Future*

Kelly Tonello *Climate Change and Cloud Forests: A Delicate Dance of Fog and Rainfall*

Rabia Amir *Cracking plant stress code: Elevating oil quality and yield for sustainable harvest*

10.30-11.00 Coffee break

Plenary session 1

Faculty of Physics, Auditorium im. Prof. Kielicha

chair: Andrzej Pacak

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|-------------|------------------------|---|
| 11.00-11.10 | Yaarob Altalli | <i>Regulation of Tissue-Specific Gene Clusters in Epidermal Development and Differentiation: Insights into Epigenetic Influence</i> |
| 11.10-11.20 | Afzal Amanullah | <i>Unravelling the Mysteries of ALG-1 and ALG-2: Masters of Gene Expression Regulation</i> |
| 11.20-11.30 | Ashvita Anand | <i>Investigating social relationships in male bonnet macaques in India</i> |
| 11.30-11.40 | Michał Delikta | <i>Ailanthus altissima (Mill.) Swingle as an invasive alien species settling in Europe - projections of invasion dynamics and directions.</i> |
| 11.40-11.50 | Bartłomiej Domaszewicz | <i>Paleogeography of Gondwana's north-western margin during the Devonian evolution of Reik Ocean.</i> |
| 11.50-12.00 | Kacper Dudczak | <i>A virus-host dataset for building machine learning models</i> |
| 12.00-12.10 | Zofia Grajek | <i>Circulation conditions of halny occurrence in the Tatras Importance of shape</i> |
| 12.10-12.20 | Marta Gratkowska | <i>Dimensions of human vertebral column from medieval to modern times</i> |
| 12.20-12.30 | Julia Gwiazdowska | <i>The effect of fungicides on the production of the major allergen of Alternaria alternata spores (Alt a 1) - preliminary study</i> |
| 12.30-12.40 | Paulina Romel | <i>Reconstruction of marine ecosystems changes during the Holocene Thermal Maximum in the Northwest Passage (Canadian Arctic Archipelago) based on foraminiferal analysis – preliminary results</i> |

12.40 Discussion

13.00-14.00 Lunch

Plenary session 2

Faculty of Physics, Auditorium im. Prof. Kielicha

chair: Agata Cieřła

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|-------------|---------------------|--|
| 14.00-14.10 | Paulina Jakubiak | <i>Effects of increased temperature and fluoxetine water pollution on filtration behavior of <i>Unio tumidus</i> (Philipsson, 1788)</i> |
| 14.10-14.20 | Katarzyna Kondrat | <i>Drivers of intraspecific variation in fecundity in rowan (<i>Sorbus aucuparia</i>)</i> |
| 14.20-14.30 | Aleksandra Kudeń | <i>Effects of Mismatched Response Norms Between Parasites and Autotrophic Hosts on Lake Ecosystem Functioning (via teams)</i> |
| 14.30-14.40 | Marta Kulczak | <i>More than just a free ride - the evolutionary significance of the phoresy phenomenon for the biology and ecology of mites from the suborder Uropodina</i> |
| 14.40-14.50 | Julia Kurzawska | <i>RNA binding by KH-domain proteins <i>Khpa</i> and <i>Khpb</i> from <i>Streptococcus pneumoniae</i></i> |
| 14.50-15.00 | Magdalena Majchrzak | <i>Assessing the influence of urban heat island on the phenology of <i>Betula pendula</i> Roth., using satellite imagery data</i> |
| 15.00-15.10 | Zofia Marek | <i>Light as a pollution of the aquatic environment: structure of phytoplankton communities in Lake Durowskie</i> |

15.10-15.40 Coffee break

Faculty of Physics, Auditorium im. Prof. Kielicha

chair: Maciej Janicki

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|-------------|-------------------------|--|
| 15.40-15.50 | Elżbieta Rudy | <i>Analysis of the Epigenetic Regulators in Dark-Induced and Developmental Leaf Senescence in Barley Leaf</i> |
| 15.50-16.00 | Weronika Stróżewska | <i>Growth patterns of children born Small for Gestational Age with and without catch-up growth</i> |
| 16.00-16.10 | Dominika Winiarska | <i>Presentation "Detection distance differs according to detection method in passive acoustic monitoring"</i> |
| 16.10-16.20 | Joanna Zwolenkiewicz | <i>Investigating the role of the ProQ protein in the interaction between non-coding RNAs and their regulated mRNAs in <i>Escherichia coli</i>.</i> |
| 16.20-16.30 | Kayode Olatunji Olabode | <i>Effects of amendments on the release of antimony and lead from spiked soils under different moisture conditions</i> |
| 16.30-16.40 | Filip Mić | <i>Spatial and temporal variability of the growing season in central and northern Europe</i> |
| 16.40-16.50 | Shabani Selemani | <i>Repeated adaptation to habitat in the extremely variable and widespread Common Evening Brown butterfly</i> |
| 16.50-17.00 | Karolina Splawska | <i>Is there competition between crossover pathways for meiotic DNA double-strand breaks?</i> |
| 17.00 | Discussion | |

16 April 2024

10.00-12.00

Coffee & Sweets Poster Session

Faculty of Physics, main hall

chair: Michał Rurek

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| P01 | Adam Szczapiński | <i>Assessing decadal trends and climate drivers of North Atlantic tropical and post-tropical cyclones (1970-2019)</i> |
| P02 | Aleksandra Dziegelewska | <i>Compounds from cinnamon bark (<i>Cinnamomum verum</i> J.Presl) as a potential danger to aquatic ecosystems</i> |
| P03 | Aleksandra Grzanka-Maziarz | <i>The roles and therapeutic potential of distinct dystrophin and utrophin isoforms in the peripheral nervous system</i> |
| P04 | Aleksandra Zwolska | <i>Urban Growth's Implications on Land Surface Temperature in a Medium-Sized European City based on LCZ classification</i> |
| P05 | Aneta Łyś | <i>The functional meaning of 5'-end-extended transcripts of protein-coding genes in human.</i> |
| P06 | Ankit Roy | <i>Mechanistic Understanding of <i>picd-1</i> in Transposon Silencing and Genome Maintenance</i> |
| P07 | Anna Bobińska | <i>Climate change as a basis for taking participatory activities in geographic and climate education</i> |
| P08 | Anna Walczak | <i>Insight into age-related changes of the human facial skeleton based on medieval European osteological collection</i> |
| P09 | Asad Siddiquee | <i>Small-scale variability in the <i>Bet v 1</i> release during pollination of <i>Betula pendula</i> in Poznań, Poland</i> |
| P10 | Bharti Aggarwal | <i>Exploring the functions of liverwort-specific <i>MpmiR1887</i> and <i>MpmiR11796</i> in <i>Marchantia polymorpha</i></i> |
| P11 | Bogna Malinowska | <i>Effects of toxic substances on antipredator behavior of shrews and their food selectivity.</i> |
| P12 | Cyprian Kowalczyk | <i>Structure of subfossil diatoms assemblages in coastal lakes of Burin Peninsula (Newfoundland, Canada)</i> |
| P13 | Damini Saha | <i>Investigating the role of DPPIV protease in Repeat Expansion Diseases</i> |
| P14 | Dominika Jaster | <i>Changing climatic conditions and the growth of vineyards in the Zielona Gora region</i> |
| P15 | Dorota Kizewska | <i>Rekonstrukcja in vitro oddziaływań pomiędzy tkanką mezenchymalną i epithelialną w rozwoju ludzkich wysp trzustkowych</i> |
| P16 | Edyta Urbaniak | <i>Rola FKBP Izomerazy prolilowej 2 w zrozumieniu procesu dojrzewania ludzkiej insuliny.</i> |
| P17 | Ekaterina Shcheglova | <i>SPOCK2 impact on human pluripotent stem cell differentiation towards pancreatic beta cells</i> |
| P18 | Emilia Sokołowska | <i>Temporal avoidance of noise by songbirds</i> |

10.30 -12.00

Aleksandra Lewandowska

Seminar with General Board Member, Eurodoc

Young researchers' first steps in an international environment

Registration: <https://forms.office.com/e/RT2B10AxHK>

12.00-13.00 Lunch

- P19** Esperanza Sáez Zárate *Fantastic Recombination Modifier Loci and Where to find them*
- P20** Filip Skop *Reconstruction of meteorological environment leading to a catastrophic severe weather outbreak in Poland on July 4th 1928, based on archival data and 20th Century Reanalysis*
- P21** Galin Gospodinov *She, He or They/Them – investigation of the sexual systems in *Riccia fluitans* and *Riccia rhenana**
- P22** Gulsamal Askarova *How does evolution in a stable and fluctuating environment shape the niche breadth of a plant-feeding arthropod?*
- P23** Jagoda Byszko *“Unraveling Social Complexity: Preliminary Insights from Network Analysis of Wild Chimpanzees in Sebitoli, Kibale National Park, Uganda”*
- P24** Jakub Klęsk *The Color Variability of Upper Neogene Clay Sediments in the Józwin IIB Lignite Open-Pit Mine on the Polish Lowland*
- P25** Joanna Kozłowska-Masłoń *miR-27b-5p: a novel player in the biology of head and neck squamous cell carcinoma*
- P26** Julia Gostyńska *Exploring allelopathic potential: studying the effects of exposure time and *Cladophora glomerata* (L.) Kütz. phenolic acids concentration on pleustophytes and cyanobacteria*
- P27** Julia Gwiazdowska *The effect of fungicides on the production of the major allergen of *Alternaria alternata* spores (Alt a 1) - preliminary study*
- P28** Julia Maciorowska *Intergenerational Plant Stress Memory: Does It Exist in Barley?*
- P29** Kaja Jaskot *Utilizing Silica Nanoparticles for Cellular Senescence Detection*
- P30** Karolina Wlekklik *Screening of lupin (*Lupinus spp.*) lipases and phospholipases for functional analogs of yeast Atg15*

15.00-19.00**Cheese and Fruits Poster Session**

- P31** Katarzyna Morańska *Uterine microbiome composition in patients with uterine fibroids*
- P32** Kinga Buda *Commonness and intensity of nocturnal singing by diurnal birds in temperate regions*
- P33** Klaudia Samorowska *Poster title:
Long noncoding RNAs in breast cancer epitranscriptomics*
- P34** Klaudia Kortus *The presence of antibiotic-resistant and integron-harboring bacteria in the indoor air in Poznań public buildings*
- P35** Krzysztof Stawrakakis *Mykobiome diversity of crop plant *Hordeum vulgare* phyllosphere: a field study*
- P36** Krzysztof Wójcicki *The statins induce changes in aerobic metabolism in astrocyte cells*
- P37** Krzysztof Zagata *Mini-map as a navigation aid in virtual geographical space - study based on selected video games*
- P38** Lia Zampa *STAND OUT FROM THE CROWD: Strength of acoustic identity coding in territorial bird species.*
- P39** Magdalena Strugała *Factors affecting formation of the diatom communities' structure on *Cladophora glomerata**

P40	Małgorzata Pelelska	<i>Characterization of WHIRLY proteins' activity in regulating abscisic acid signaling.</i>
P41	Maria Mamońska	<i>Different RNA recognition by the FinO-domain proteins ProQ and FinO depends on RNA sequence surrounding transcription terminator hairpins</i>
P42	Maria Tomys	<i>Role of mitochondria in the stress adaptation and stress response in tobacco BY-2 cells</i>
P43	Marta Zimna	<i>Pseudouridine in plant miRNA biogenesis and action.</i>
P44	Mateusz Pluskota	<i>Anthropogenic influence on antibiotic resistance genes in polar air: insights from Central Spitsbergen</i>
P45	Mateusz Robaczewski	<i>“History of unsuccessful town foundations in the bog archives of Głębozec in the Zielonka Forest”</i>
P46	Mateusz Wesołowski	<i>Poster title: Do mitochondria accompany chloroplasts during their movements?</i>
P47	Michalina Krakowiak	<i>Microbial contamination in tardigrade samples – a challenge for DNA isolation</i>
P48	Michał Zacharyasiewicz	<i>The role of dead wood in shaping mite communities from the Uropodina suborder (Acari: Mesostigmata)</i>
P49	Natalia Konopińska	<i>Tachykinin-related peptides as a potential enhancer of the activity of female reproductive system in beetles</i>
P50	Natalia Krupka	<i>Model of morphological changes in a lowland river bed at low water level on the example of the Welna River</i>
P51	Natalia Lis	<i>Competition, cooperation, and parental effects in larval aggregations formed on carrion by communally breeding beetles Necrodes littoralis (Staphylinidae: Silphinae)</i>
P52	Naveen Nedunchezian	<i>Poster Title: Role of glial pituicytes in neurohypophyseal synaptic morphogenesis.</i>
P53	Neelam Porwal	<i>Sexually-selected male weapon and the risk of population extinction under increasing temperatures</i>
P54	Nhat Tan Pham	<i>Genome assembly of the Common Evening Brown butterfly (Melanitis leda)</i>
P55	Nikola Góral	<i>Development of new microsatellite markers to test the dispersal abilities of damselfly Ischnura pumilio</i>
P56	Nikola Musiała-Kierklo	<i>Endogenous modulation of MBNL1 expression via RNA activation (RNAa) as a novel therapeutic approach towards myotonic dystrophy type 1 (DMI).</i>
P57	Oleksandr Ostrovskyy	<i>Guardians of Neuronal Health: Exploring Dystrophin's Role in Astrocytic Mitochondrial Function and Cytoskeletal Integrity</i>
P58	Oliwia Sęk	<i>Toxic alkaloids vs rodents - influence of endophytic fungi on small herbivorous mammals.</i>
P59	Patrycja Świergiel	<i>Deciphering the molecular mechanisms underlying the sdRNAs synthesis mediated by FUS.</i>
P60	Patryk Matczak	<i>presentation title: Supercell thunderstorm with heavy rainfall in the Gorzow Wielkopolski area on September 8, 2022</i>
P61	Paulina Anna Wilanowska	<i>Relations between microbiome, telomere length and personality</i>
P62	Piotr Janiec	<i>Permafrost degradation following wildfires – can we monitor it from the space?</i>

P63	Remigiusz Gębka	<i>Identification of determinants of small noncoding RNA cleavage from functional RNAs using machine learning methods</i>
P64	RENU	<i>Functional characterization of WHIRLY protein in Arabidopsis thaliana</i>
P65	Robert Pasieka	<i>Elucidating the functions of U7 snRNA-dependent lincRNAs in human cells</i>
P66	Ronald Łaniecki	<i>Observations on ontogeny of prodorsal setation in the mite family Cocceupodidae Jesionowska (Acariformes: Prostigmata: Eupodoidea)</i>
P67	Sara Henry	<i>Specific and common role of ETV1,4 and 5 transcription factors in human pluripotent stem cells.</i>
P68	Sebastian Szczepański	<i>The influence of interspecific gene flow on genetic divergence of closely related pine species</i>
P69	Shraddha Shinde	<i>"Choreographing the Symphony of Gene Expression: Deciphering RNAPII Elongation Rate Dynamics in Neurodevelopment"</i>
P70	Szymon Świątek	<i>Geochemical impact on the development of seismite - preliminary results of experimental research</i>
P71	Tansu Doran	<i>The role of PRC complexes and the gene desert located in EDC gene cluster in the establishment of keratinocyte-specific promoter-enhancer network</i>
P72	Thi Ngoc Pham	<i>Allergenic potential of urban green spaces: ornamental species as a source of pollen allergens and the cause of increased sensitization of city inhabitants</i>
P73	Tomasz Krupka	<i>The influence of the Flinta River as a tributary on the distribution of bedload in the Welna River - a case study</i>
P74	Weronika Kostańska	<i>The use of modern information and communication technologies in the promotion of tourist values and in the sustainable development of tourism on the island of Wolin</i>
P75	Wiktoria Kleczkowska	<i>Changes In Redox Balance and Its Anti-Senescence Potential; Based On Dark Induced Leaf Senescence In Barley Leaves</i>
P76	Wojciech Wysoczański	<i>Can the mycobiome of mountain avens Dryas octopetala be an indicator of climate change?</i>
P77	Gilbert Zasoński	<i>Dynamics of CUGexp RNA foci formation in MBNL1/2 knockout cell line with inducible overexpression of individual MBNL isoforms fused with fluorescent proteins</i>
P78	Patryk S. Pankowski	<i>The short and long-term biological and demographic effects of the 1866 cholera epidemic in Poznań</i>
P79	Daniel Fajfer	<i>The role of Lepidurus apus and Eubranchipus grubii in food webs connecting various ecosystems</i>

17 April 2024

9.00 Keynote 3

Faculty of Physics, Auditorium Maximum

chair: Agnieszka Ludwików

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| Patrick Gallois | <i>Plant programmed cell death and proteases</i> |
| Collin Waters | <i>The Anthropocene is real despite news to the contrary!</i> |
| Simon Turner | <i>How, where, and why do you place a golden spike to start the Anthropocene</i> |

10.30-11.00 Coffee break

11.00 Plenary session 3

Faculty of Physics, Auditorium Maximum

chair: Aleksandra Świda-Barteczka

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|-------------|----------------------|---|
| 11.00-11.10 | Yufeng Guan | <i>Aldehyde Dehydrogenase as a Metabolic Sensor of Nitroxyl in Arabidopsis</i> |
| 11.10-11.20 | Agata Henschke | <i>Nano-intervention to eliminate therapy-induced cellular senescence</i> |
| 11.20-11.30 | Grzegorz Jankowiak | <i>Challenges of Remote Sensing in Tree Leaf Disease Diagnosis</i> |
| 11.30-11.40 | Rafał Kielczewski | <i>Holocene history of CaCO₃ precipitation in two alkaline spring-fed fens from northeastern Poland and western Latvia</i> |
| 11.40-11.50 | Magda Kopczyńska | <i>Exploring SETD2's Role in Epigenetic Control of Transcription Termination</i> |
| 11.50-12.00 | Wojciech Łuczak | <i>Development of a method for analyzing polymorphic STR markers for human DNA genotyping.</i> |
| 12.00-12.10 | Katarzyna Malinowska | <i>Comparing analytical protocols for identifying causes of population changes</i> |
| 12.10-12.20 | Katarzyna Markowska | <i>rangr: An R package for mechanistic, spatially explicit simulation of species range dynamics</i> |
| 12.20-12.30 | Athul Ramesh Ramesh | <i>Presentation title- Unraveling the Intricacies of Vascular Permeability: Navigating the Molecular Tapestry of Endothelial Barrier Function</i> |
| 12.30 | | <i>Discussion</i> |

12.45-14.00 Lunch

Plenary session 4

Faculty of Physics, A Auditorium Maximum

chair: Agata Cieśla

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|-------------|---------------------|--|
| 14.00-14.10 | Daria Stube | <i>The role of DEAD-box helicases: RH11, RH37, RH52 in miRNA biogenesis</i> |
| 14.10-14.20 | Józefina Wasilewska | <i>Genetic diversity and population structure of <i>Borrelia afzelii</i> in Poland</i> |

14.20-14.30	Anna Wilhelm	<i>The role of MSH7 protein in polymorphism dependent crossover stimulation in Arabidopsis thaliana</i>
14.30-14.40	Filip Wojnarowski	<i>Brief characterisation of two Pseudomonas syringae phages isolated from decaying plant matter</i>
14.40-14.50	Zuzanna Zając	<i>Transcriptomic insights into A.thaliana stress response via plaNET-seq technique</i>
14.50-15.00	Jakub Zawadzki	<i>Reconstruction of Historical Environment and Future Utilization of Heritage Objects</i>
15.00-15.10	Tomasz Bartylak	<i>Testing the limits of tardigrade resistance to repeated potassium cyanide exposure</i>

15.10-15.40 Coffee break

chair: Małgorzata Wojtkowska

15.40-15.50	Jakub Buda	<i>Radioisotopes on glaciers: understanding of accumulation processes and threat to glacier and glacier-adjacent ecosystems</i>
15.50-16.00	Adrianna Budzińska	<i>Bisphosphonates zoledronate and alendronate induce aerobic metabolism adaptations in endothelial cells</i>
16.00-16.10	Natalia Oniszczyk	<i>Dilemmas of the local community towards tourism in Spitsbergen - project outline</i>
16.10-16.20	Mateusz Oszust	<i>Impact of great cormorants (Phalacrocorax carbo L.) on terrestrial animals</i>
16.20-16.30	Natalia Pawłowska	<i>The gut microbiota composition in adults with cystic fibrosis and its association with severity of CFTR gene mutation and nutritional status</i>
16.30-16.40	Anastasiia Polishchuk	<i>Ecuador and the Tardigrades: a further study of taxonomic diversity</i>
16.40-16.50	Patrycja Popiel	<i>Interactions between the northern white-breasted hedgehog Erinaceus roumanicus and the European hedgehog Erinaceus europaeus in the Polish sympatry zone - competition or hybridization?</i>
16.50	Discussion	