

Session Program

19-25 May 2024



Karpacz Winter Kindergarten of Theoretical Physics

Kindergarten

Karpacz

Holiday and Conference Centre "Raven Rocks" ("Krucze Skały") Address: Wilcza 1, 58-540 Karpacz

Tuesday 21 May

14:30

Kindergarten: Invited lecture

Session |

Location: Karpacz, Holiday and Conference Centre "Raven Rocks" ("Krucze Skały") Address: Wilcza 1, 58-540 Karpacz

14:30-16:00

Lecture "Accelerator Disaster Scenarios, the Unabomber and Scientific Risk"

Speaker

Prof. Joseph Kapusta

16:00

16:00

Kindergarten: Participants' presentations

Session |

Location: Karpacz, Holiday and Conference Centre "Raven Rocks" ("Krucze Skały") Address: Wilcza 1, 58-540 Karpacz

16:00-16:30

Presentation "Bounce of spinning sports balls"

Speaker

Stanisław Jankowski

16:30-17:00

Presentation "Public opinion dynamics in the active voter model"

Speaker

Stanisław Rakowski

17:00-17:30

Presentation "Energy levels in a 2D spin-dependant optical lattice"

Speaker

Kamil Dutkiewicz

17:30-18:00

Presentation "Theory of stellar nucleosynthesis at low-energy scales"

Speaker

Marcin Sokołowski

18:00

Wednesday 22 May

14:30

Kindergarten: Students' presentations

Session |

Location: Karpacz, Holiday and Conference Centre "Raven Rocks" ("Krucze Skały") Address: Wilcza 1, 58-540 Karpacz

14:30-15:00

Presentation "Introductions to generalised symmetries"

Speaker

Stanisław Kalinowski

15:00-15:30

Presentation "Haldane phase in fermionic systems"

Speaker

Agnieszka Jażdżewska

15:30-16:00

Presentation "Spontaneous symmetry breaking and Goldstone Theorem"

Speaker

Emilia Szymańska

16:00-16:30

Presentation "Spontaneous symmetry breaking of global symmetries"

Speaker

Dariia Smolenchenko

16:30-17:00

Presentation "Non-Hermitian control of Hermitian waveguide arrays"

Speaker

Spyros Rizos

17:00-17:30

Presentation "Closing the gap in XXZ chain via magnon interactions"

Speaker

Mikołaj Walicki

17:30-18:00

Presentation "Unveiling the mysteries of diamagnetism: from theory to fabrication"

Speaker

Marcel Blaut

18:00

Thursday 23 May

10:15

Kindergarten: Poster session 1

Session |

Location: Karpacz, Holiday and Conference Centre "Raven Rocks" ("Krucze Skały") Address: Wilcza 1, 58-540 Karpacz

10:30-11:45

Poster "Uncertainty relations in Defermed Special Relativity"

Speaker

Grzegorz Dziewisz

10:30-11:45

Poster "Spontaneous Symmetry Breaking and Goldstone Theorem"

Speaker

Emilia Szymańska

10:30-11:45

Poster "Simulating and explaining the mechanism behind magnetic gears"

Speaker

Tomasz Mazur

10:30-11:45

Poster "The Mass And Possible Quantum Numbers of X(6900)"

Speaker

Morgan Kuchta

10:30-11:45

Poster "The mystery of classical cepheids in globular clusters"

Speaker

Zuzanna Ryduchowska

10:30-11:45

Poster "Gravitational waves"

Speaker

Maja Milas

12:00

14:00

Kindergarten: Participants' posters session

Session |

Location: Karpacz, Holiday and Conference Centre "Raven Rocks" ("Krucze Skały") Address: Wilcza 1, 58-540 Karpacz

14:00-15:00

Poster "Black hole shadows"

Speaker

Laura Busak

14:00-15:00

Poster "Energy levels in a 2D spin dependent optical lattice"

Speaker

Kamil Dutkiewicz

14:00-15:00

Poster "The effect of late-time heating in hybrid millisecond pulsars"

Speaker

Pavlo Panasiuk

14:00-15:00

Poster "QED synchrotron radiation extension for PIConGPU simulation"

Speaker

Filip Optołowicz

14:00-15:00

Poster "Quantum Kinetic Equation for Pair Production in a Laser Field: Is There a Berry Phase?"

Speaker

Levon Astaryan

15:00

16:30

Kindergarten: Invited lecture

Session |

Location: Karpacz, Holiday and Conference Centre "Raven Rocks" ("Krucze Skały") Address: Wilcza 1, 58-540 Karpacz

16:30-18:00

Lecture "Looking at the Universe: Neutron Stars as laboratories for nuclear and particle physics "

Speaker

Prof. Constanca Providencia

18:00

Friday 24 May

14:30

Kindergarten: Invited lecture

Session |

Location: Karpacz, Holiday and Conference Centre "Raven Rocks" ("Krucze Skały") Address: Wilcza 1, 58-540 Karpacz

14:30-15:30

Lecture "A Journey through the Mysteries of Neutron Stars"

Speaker

Dr Fiorella Burgio

15:30

15:30

Kindergarten: Participants' presentations

Session |

Location: Karpacz, Holiday and Conference Centre "Raven Rocks" ("Krucze Skały") Address: Wilcza 1, 58-540 Karpacz

15:30-16:00

Presentation "The mystery of classical cepheids in globular clusters"

Speaker

Zuzanna Ryduchowska

16:00-16:30

Presentation "Green's Function method for Tetraquarks"

Speaker

Morgan Kuchta

16:30-17:00

Presentation "Simulating cosmic ray air shower radio emission for the Askaryan Radio Array"

Speaker

Nicolas Moller

17:00-17:30

Presentation "Cosmological horizons and conserved quantities"

Speaker

Robert Matysiak

17:30-18:00

Presentation "The footprint of nuclear saturation properties on the neutron star f mode oscillation frequencies: a machine learning approach"

Speaker

Deepak Kumar

18:00