

Session Program

23–27 Jun 2025

**South Africa - JINR Workshop on Theoretical and
Computational Physics**

Wednesday

BLTP, conference hall
Dubna, Russia

Wednesday 25 June

09:00

Wednesday: (Chairman: P. Vaandrager)

Session | Location: BLTP, conference hall

09:00–09:30

JINR-UNISA COLLABORATION ON NONLINEAR AND CHAOTIC PHENOMENA OCCURING IN SUPERCONDUCTING ELECTRONIC AND SPINTRONIC JOSEPHSON STRUCTURES

Speaker

Prof. Yu. M. Shukrinov

09:30–10:00

Computational study of materials in the department of Physics (University of Limpopo)

Speaker

Dr Mulatedzi Gandamipfa

10:00–10:30

Precision Physics for Fundamental Physics

Speaker

Dr Vladimir Korobov

10:30

11:00

Wednesday: (Chairman: H. Van Deventer)

Session | Location: BLTP, conference hall

11:00–11:30

Thermal enhancement of nuclear (anti)neutrino emission during pre-supernova stage

Speaker

Alan Dzhioev

11:30–12:00

An Introduction to Solving Differential Equations with Physics-Informed Neural Networks

Speaker

Shivani Mahashakti Pillay

12:00

13:30

Wednesday: (Chairman: S. Pillay)

Session | Location: BLTP, conference hall

13:30–14:00

Role of the hard-core nucleon-nucleon interactions on the structure of three-body weakly bound systems

Speaker

Prof. Bahati Mukeru

14:00–14:30

Neutron stars as a nuclear physics laboratory

Speaker

Dr Evgeni Kolomeitsev

14:30–15:00

The entrance channel effect in the reactions of heavy-ion collisions

Speaker

Avazbek Nasirov

15:00

15:30

Wednesday: (Chairman: M. Maswanganye)

Session | Location: BLTP, conference hall

15:30–16:00

Neural Operators and Neural Networks for Physics Applications

Speaker

Heinrich van Deventer

16:00–16:30

Spectrum of frustrated magnets

Speaker

Dr Pavel Maksimov

16:30