

## **Session Program**

23–27 Jun 2025

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

## ***Monday***

BLTP, conference hall  
Dubna, Russia

# Monday 23 June

08:30

## Monday: (Chairman: S. Rakitianski)

Session | Location: BLTP, conference hall

09:00–09:30 **Opening**

09:30–10:00 **From Dinuclear System to Close Binary Cosmic Objects**

### Speaker

Prof. Nikolai Antonenko

10:00–10:30 **Polarization, vorticity and shear in hadronic and heavy-ion collisions**

### Speaker

Oleg Teryaev

10:30

11:00

## Monday: (Chairman: M. Lekala)

Session | Location: BLTP, conference hall

11:00–11:30 **Leigh-Strassler theories and their Hopf algebra structure**

### Speaker

Dr Hector Dlamini

11:30–12:00 **Giant resonances in nuclei and their wavelet analysis**

### Speaker

Valentin Nesterenko

12:00

13:30

## Monday: (Chairman: G. Rampho)

Session | Location: BLTP, conference hall

13:30–14:00 **Small atomic He clusters at low energies**

### Speaker

Dr Elena Kolganova

14:00–14:30

**At the dawn of research in artificial intelligence and structured programming in physics institute**

### Speaker

Alexander Zakharov

14:30–15:00 **Bounds on variation of eigenvectors and spectral subspaces under a perturbation**

### Speaker

Alexander Motovilov

15:00

15:30

## Monday: (Chairman: I. David)

Session | Location: BLTP, conference hall

15:30–16:00 **R-matrix and Jost function analysis of experimental nuclear scattering data.**

### Speaker

Dr Paul Vaandrager

16:00–16:30 **New variational method in quantum few-body theory**

**Speaker**

Prof. Sergei Rakityansky

16:30–17:00

**Recent paradoxes of cosmology**

**Speaker**

Dr Anton Baushev

17:00