



# 28th International Scientific Conference of Young Scientists and Specialists (AYSS-2024)

## Monday 28 October 2024

### Mathematical Modelling and Computational Physics - 4-475 (14:50 - 16:05)

time	[id] title	presenter
14:50	[1794] Mathematical Modeling of Radiation-Induced Effects at the Molecular and Cellular Levels of Central Nervous System	MUNKHBAATAR, Batmunkh
15:20	[1537] Computer simulation of shape effects in electrostatic and magnetostatic interactions	SAVIN, Vladimir
15:35	[1547] Modelling the phase dynamics of long superconductor-ferromagnet-superconductor $\phi_0$ Josephson junction	BASHASHIN, Maxim
15:50	[1564] Degradation of Thermal Conductivity of Epoxy Resin-Diamond Filler Composites Under Radiation	LIGDENOVA, Tuyana

### Mathematical Modelling and Computational Physics - 4-475 (16:30 - 17:15)

time	[id] title	presenter
16:30	[1641] Toolkit in Python for simulation of controllable magnetization reversal in a chain of $\Phi_0$ junctions by an alternating voltage pulse	Mrs RAHMONOVA, Adiba
16:45	[1571] Quality random number generator	DIMA, Maria

# Tuesday 29 October 2024

## Mathematical Modelling and Computational Physics - 4-475 (12:45 - 13:30)

time	[id] title	presenter
12:45	[1681] Investigation of the fractal structure of deciduous and coniferous trees using small-angle neutron scattering simulation experiments	SHNYRKOV, Oleg
13:00	[1702] Solving coupled cluster equations using tensor train decomposition	RUMIANTSEV, Artem