



# Vortex states in nuclear and particle physics

Friday, 26 April 2024

Talks: Nuclear applications (09:00 - 10:20)

-Conveners: Yifei Niu

time	[id] title	presenter
09:00	[11] Atomic Spectroscopy with Twisted Photons	Prof. AFANASEV, Andrei
09:40	[12] Structured Quantum Waves: From Light to Matter Waves	Prof. FICKLER, Robert

Talks: Nuclear applications (10:50 - 12:10)

-Conveners: Robert Fickler

time	[id] title	presenter
10:50	[13] A novel way to study nuclear giant resonances with vortex gamma photons	Prof. NIU, Yifei
11:30	[15] Structured neutron waves	Prof. PUSHIN, Dmitry

Talks: Vortex hadrons (14:00 - 15:40)

-Conveners: Dmitry Pushin

time	[id] title	presenter
14:00	[18] Nuclear excitation by electron capture with electron vortex beams	Prof. WU, Yuanbin
14:40	[19] Nuclear photoabsorption in 229-Th using twisted light	KIRSCHBAUM, Tobias
15:10	[17] Production of Neutron with Orbital Angular Momentum for Fundamental Physics Experiments	GEERITS, Niels

Talks: Nuclear applications (16:10 - 18:10)

-Conveners: Alisa Chaikovskaia

time	[id] title	presenter
16:10	[16] Time-like proton form factors with vortex states	Dr KORCHAGIN, Nikolai
16:40	[25] Momentum space oscillation properties of vortex states collision	ZHAO, Pengcheng
17:10	[9] The superkick effect in high-energy vortex state collisions	LIU, Bei
17:40	[10] Detecting the Vortex state of high-energy electrons through elastic electron scattering	LI, Zhengjiang