

82nd International Scientific Conference of the University of Latvia, section “Quantum Sensors and Devices”, program

Latvijas Universitātes 82. starptautiskās zinātniskās konferences sekcijas “Kvantu sensori un ierīces” programma

Thursday, 8 February 2024
13:00 PM, House of Nature, UL, auditorium 702

Ceturtdien, 2024. gada 8. februārī
plkst. 13:00, LU Dabas māja, 702 auditorija

13:00 – 13:05	Opening / Atklāšana	
13:05 – 13:20	Austris Akmentins; Vyacheslavs Kashcheyevs Department of Physics, UL	Characterization of shallow quantum dots using the 1D cubic potential model Seklu kvantu punktu raksturošana izmantojot 1D kubiskā potenciāla modeli
13:25 – 13:40	Kiryl Niherysh ^{1,2} ; Xavier Palermo ² ; Ananthu Surendran ² ; Yuchen Ji ³ ; Xufeng Kou ³ ; Donats Erts ¹ ; Thilo Bauch ² and Floriana Lombardi ² ¹ Institute of Chemical Physics, UL ² Department of Microtechnology and Nanoscience – MC2, Chalmers University of Technology ³ ShanghaiTech University	Shaped topological insulators: towards single-electron charge pump Topoloģiskie izolatori vienelektronu sūkņa izstrādē
13:45 – 14:00	Reinis Lazda; Antra Asare; Emils Smits; Mona Jani; Florian Gahbauer and Marcis Auzinsh Laser Centre, UL	Nitrogen - Vacancy centers in diamond as high sensitivity quantum sensors of magnetic field Slāpekļa - vakances centri dimantā kā augstas jutības magnētiskā lauka kvantu sensori
14:05 – 14:20	Coffee break / Kafijas pauze	
14:20 – 14:35	Ralfs Suba; Elna Pavlovskā; Vyacheslavs Kashcheyevs Department of Physics, UL	Theoretical exploration of constraints for flying qubit realisation with sound-driven electron technologies Teorētiska nosacījumu izpēte lidojošu kubitu realizācijai ar akustiski vadīto elektronu tehnoloģijām

14:40 – 14:55	Arturs Bundulis; Aivars Vembris Institute of Solid State Physics, UL	Organic quantum light sources: novel materials for integrated quantum photonics Organiskie kvantu gaismas avoti: jauni materiāli integrētai kvantu fotonikai
15:00 – 15:15	Kristians Draguns; Janis Alnis Institute of Atomic Physics and Spectroscopy, UL	Dispersion engineering of Ta ₂ O ₅ WGM resonators Dispersijas optimizēšana priekš Ta ₂ O ₅ ČGM rezonatoriem
15:20 – 15:35	Arturs Mozers; Antons Nikolajevs; Linda Serzane-Sadovska; Florian Gahbauer and Marcis Auzinsh Laser Centre, UL	Atomic magnetometers and a method for improving their accuracy Atomu magnetometri un metode to precizitātes uzlabošanai
15:40 – 15:45	Closing remarks	
15:45 – 16:15	Discussions / refreshments	