



82<sup>nd</sup> International Scientific  
Conference of the  
University of Latvia 2024

Atomu, molekulu un optiskas fizikas  
sekcija  
(LU FMOF Lāzeru Centra sekcija)

Atomic, molecular and optical  
physics section  
(LU FMOF Laser Centre section)

Thursday, 1<sup>st</sup> of February 2024, 10:00 AM,  
Jelgavas iela 3, 801/802 room

## Programma/Programme

<b>Chairpersons: Prof. Ruvins Ferbers, Prof. Mārcis Auziņš</b>		
<b>10:00–10:20</b>	<b>K. Korenika, K. Puķītis</b>	Spectroscopy of a sample of RV Tauri stars without IR excess: First results
<b>10:20–10:40</b>	<b>D. Jermacane, A. Lapins, I. Klincare, M. Tamanis, and R. Ferber</b>	Determination of absolute numbering of vibrational levels in triplet $c^3\Sigma^+$ state of RbCs molecule
<b>10:40–11:00</b>	<b>L. Seržane-Sadovska, A. Mozers*, F. Gahbauer and M. Auzinsh</b>	Probing angular momentum alignment in atomic $^{133}\text{Cs}$ with radio frequency field
<b>11:00–11:30</b>	<b>Kafijas pauze, diskusijas/Coffee break, discussions</b>	
<b>11:30–11:50</b>	<b>E. Šmits, R. Lazda, F. Gahbauer and M. Auzinsh</b>	Microwave antenna design optimization for use in wide frequency range ODMR measurements
<b>11:50–12:10</b>	<b>R. Lazda, M. Jani, A. Asare, E. Šmits, F. Gahbauers and M. Auzinsh</b>	NV based magnetometer sensitivity optimization for one-dimensional magnetic field measurements
<b>12:10–12:30</b>	<b>S. Filatovs, M. Auzinsh</b>	Towards two Bloch sphere representation of two qubit states and unitaries
<b>12:30–13:--</b>	<b>Noslēgums, diskusijas Conclusions, discussions</b>	