

The updated **final Program** is published in the links below:

Link to Laser Physics Group at NTNU: <https://www.ntnu.edu/physics/research/laser-physics>

Link to Soft and Complex Matter Lab at NTNU: www.softcomlab.com

Preliminary*) Program of the " International Workshop on Innovation for Quantum Sensing Technologies" in Svolvær, 6-8 June 2025:

	Friday 6th June / 2025
All day	<i>Arrival</i>
	Saturday 7th June / 2025
8:30-9:00	Irina T. Sorokina & Jon Otto Fossum: <i>Welcome and introduction</i>
9:00	Plenary talk (Prof. Sergey Mirov) Cr:ZnS/Se lasers and combs for sensing, spectroscopy, and secure communication.
10:00	Invited talk (Prof. Irina T. Sorokina) ‘SFF and mid-IR frequency combs as a route towards quantum-enhanced sensing’
11:00	Invited talk (Prof. Jon Otto Fossum) ‘SFF and natural materials for quantum technology’
11:30	Invited talk (Dr. Barbara Pacakova) ‘Clays as the material of future’
12:00	<i>Lunch</i>
13:00	Bus excursion to Vikings museum and Henningsvør
19:00	<i>Dinner Henningsvør</i>
21:00	<i>Discussions</i>
	Sunday 8th June/ 2025
09:00	Plenary talk (Prof. Val Zwiller) Single photon generation, manipulation and detection
10:00	Invited talk (Prof. Arne Braatas and Prof. Alireza Qaiumzadeh) Light-matter interactions: spintronic-based cavity QED and Floquet engineering
10:30	Invited talk (Dr. Grzegorz Karczewski) ‘PbTe/CdTe nanocomposite – new candidate for infrared applications’
11:00	Invited talk (Prof. Christoph Brüne) ‘MBE grown thin films and low dimensional structures for next generation optical devices’
11:30	Invited talk (Dr. Marian Matejdes) ‘Functionalization of layered silicates’
12:00	Invited talk (Prof. Matti Knaapila) ‘Vacuum deposited organic semiconductors for CoE’
12:30	<i>Lunch</i>
13:30	Invited talk (Prof. Paul Gunnar Dommersnes) ‘Topological defects and turbulence in active solids’
14:00	Invited talk (Dr. Vladimir Kalashnikov) ‘Quantum Dissipative Coherent Systems: Bridging Coherence, Dissipation, and Innovations’
14:30	Invited talk (Dr. Alex Rudenkov) ‘Cr:ZnS ultrafast waveguide amplifiers and frequency combs on the way towards integration’
15:00	<i>Coffee break</i>
15:00	Invited talk (Dr. Christos Grivas) ‘Photonic on-chip integration for quantum sensing’
15:30	Invited talk (Dr. Ilse Ermini & Prof. Marisa di Sabbatino) Material Characterization Techniques for SFF.
16:10	Q&A
17:00-19:00 -	<i>Discussions</i>
19:00	<i>Dinner</i>

	Monday 9th June/ 2025
10:00-15:00	Informal discussions
15:15	<i>The end</i>

Confirmed foreign lecturers:

1. Dr. Marian Matejdes, Slovak Academy of Sciences
2. Prof. Val Zwiller, KTH, Stockholm, Sweden
3. Dr. Grzegorz Karczewski, Polish Academy of Sciences
4. Prof. Sergey Mirov, University of Alabama at Birmingham, USA

Confirmed national lecturers:

Prof. Marisa di Sabatino, NTNU	Prof. Jon Otto Fossum, NTNU
Prof. Paul Dommersnes, NTNU	Prof. Matti Knaapila, NTNU
Dr. Alexander Rudenkov, NTNU	Dr. Vladimir Kalshnikov, NTNU
Dr. Barbara Pacáková, NTNU	Dr. Ch. Grivas, NTNU
Prof. Chr. Bruene, NTNU	Dr. Ilse Ermini
Dr. Alireza Qaiumzadeh & Prof. Arne Brataas	Prof. Irina T. Sorokina, NTNU

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