

Programme for NanoLund Annual Meeting, Oct. 8th 2024

8:30 - 9:00 Coffee and registration

9:00 - 10:30 Session 1: Introduction

- Anders Mikkelsen, *NanoLund update*
- Stanley Heinze, *Introduction to the meeting theme*
- Presentation of seedling projects
- Poster pitches

10:30 - 11:00 Group photo and coffee break

11:00 - 12:30 Session 2: Quantum

- Heike Riel, *Computing – exciting as never before*
- Adam Kinos, *A high-connectivity rare-earth quantum computer can be only tens of nanometers in size*
- Alva Höglund, *Quantum dot reservoir computing*
- Harald Havir, *Matching Without Needing to Match – Charge detection with a nonlinear resonator*
- Koushik Mukherjee, *Supersolidity and Persistent Current in Ultra-Cold Dipolar Quantum Gases*

12:30 - 13:30 Lunch and posters

13:30 - 15:00 Session 3: Bio

- Sonja Aits, *Deciphering cell death with AI: text mining, computer vision and beyond*
- Pontus Nordenfelt, *Data-driven microscopy: a new approach towards high fidelity image data*
- Ruby Davtyan, *Single molecules and how to find them (on nanowires)*
- Jason Beech, *Game of life - a simple framework for viscoelastic instabilities*
- Edith Hammer, *Windows to the underground - Microbial functions and ecology in soil chips*

15:00 - 16:00 Coffee and posters

16:00 - 17:30 Session 3: Materials and devices

- Mattias Borg, *Ferroelectric memristors in Neuromorphic computing*
- Regina Dittman, *From nanoionic phenomena to bio-inspired computing*
- Abhijit Das, *On-Chip Molecular Memory integrated Optoelectronics for Neuromorphic Nanophotonics*
- Ivan Scheblykin, *Memlumors: using luminescence for calculations*
- Zisheng Yao, *4D image reconstruction from limited-angle projections for X-ray multi-projection imaging*
- Lars-Erik Wernersson, *Analogue computing with a ferroelectric transistor – How to engage in European Chips Act?*

17:30 - 18:30 Drinks, snacks and posters

18:30 - ??? Dinner and prizes