

Students session 2: Explore Leiden's Exclusive Labs

This year, the University of Leiden celebrates its 450th anniversary, marking nearly half a millennium of pioneering research and academic excellence. Throughout these years, we have been dedicated to advancing scientific knowledge and fostering innovation, placing ourselves at the forefront of discovery in various fields. To showcase Leiden's legacy and our broader connections to the research community, study association De Leidsche Flesch crafted dynamic two focus sessions.

In this second focus session, you can explore a research lab that is uniquely available at Leiden University. You will have the opportunity to immerse yourself in an in-depth, hands-on experience within a specialized area of study.

The three labs you can choose from are:

Van der Molen Lab

In the Van der Molen lab, we investigate the properties of low-dimensional materials, with an enthusiastic scientific team. We focus on two types of quantum systems: one-dimensional and two-dimensional.

To read more about their work, follow [this link](#).

<https://www.universiteitleiden.nl/en/science/physics/quantum-matter/van-der-molen-lab>

Wolfgang Loffler Lab

We do experimental and a bit theoretical research in solid-state quantum optics, GHz acoustics, and light-matter interaction on the quantum level. We investigate bright sources of true single photons with semiconductor quantum dots in optical micro cavities, and explore several directions, from beyond-QKD quantum network applications, many-photon entanglement to microscopy. We have several labs and can do many types of high-resolution (quantum-) optical spectroscopies in the visible up to the telecom spectral range, operate 2 closed-cycle optical cryostats and a good coffee machine, and we recently obtained 8 high-efficiency single photon detectors.

To read more about their work, use [this link](#).

<https://quphotonics.org/lab/>

Alexander Morin Lab

In the Morin Lab, we investigate emergent structures and dynamics of soft materials self-assembled from microscopic constituents.

We aim at understanding how specific properties of the building blocks, such as shape or self-propulsion, translate into involved macroscopic properties. We focus in particular on studying synthetic active materials and seek to unveil the mechanisms leading to genuine non-equilibrium properties. Examples of such materials include population of colloidal rollers forming flocks and 3-dimensional sediments of colloidal particles.

To read more about their work, use [this link](#).

<https://morinlab.com/>

