

Bachelor or Master Thesis Project

08.05.2018

Programming MEMS mirrors and image reconstruction for microscopy

Supervisors

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Project description

To implement laser scanning microscopy in an endoscope-based system, we need to develop software that is capable to drive a 2D MEMS mirror, to read out both the positioning data and the signal, and to subsequently reconstruct in high speed the image from the Lissajous-pattern the laser beam describes in the sample plane. The project is mainly concerned with the software part, hardware for interfacing the MEMS driver will be purchased for the project. If desired, the project can include building the optical setup for testing.

Prerequisites

- Coding skills are required
- Hands-on experience in optics setups is an asset

Practical details

The group is located at Risø Campus, and most of the work will be conducted there.

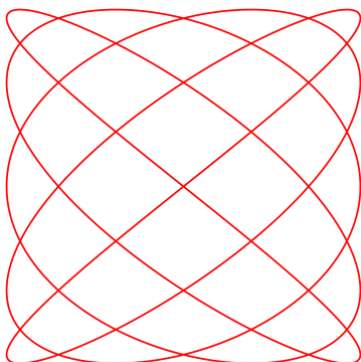


IMAGE BY ALESSIO DAMATO - OWN WORK