Outline of the project:

Single-molecule experiments allow for the real time investigation of biological complexes. In this master thesis you are building a novel microscope using multi-colour laser systems and a combination of confocal and TIRF illumination to study different time scales of DNA-protein interactions at the single-molecule level.

What is involved:

• Design and alignment of an optical setup
• Hardware-software interfacing
• Setup characterization
• Data analysis using deep neural networks
• Application to biological systems

Come join our interdisciplinary and international team!

For more information, please contact:
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