

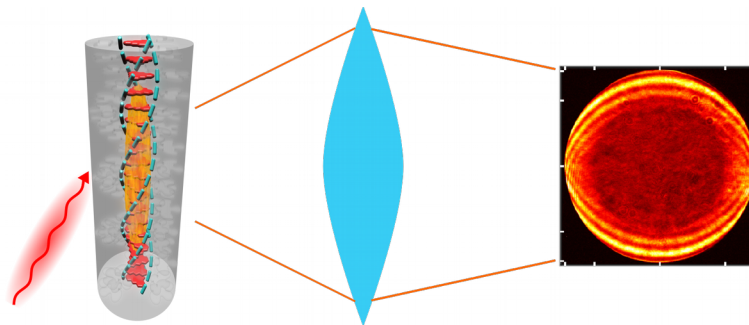


Simulation of Fourier Microscopy of Supramolecular Nanostructures

Master / Bachelor research project

Our idea:

Our group focuses on single objects, from the single molecule to aggregates of such molecules. Recently, it has been found that such structures can be used for efficient energy transport. Our goal is to observe and understand this transport using optical microscopy and spectroscopy. In this project we would like to run simulations of the Fourier image collected from the radiation emitted by nanofibres, study the influence of different parameters on the energy transport, and finally predict experimental results.



Your contribution:

- Finalising code to calculate Fourier images of ensembles of radiating dipoles with MATLAB/Octave
- Comparing different models for supra-molecular structures and energy transfer
- Study the influence of structure, exciton delocalisation, and disorder on Fourier images
- Develop fitting algorithms to compare simulations with data

Contact us:

Learn more and get to know us:

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