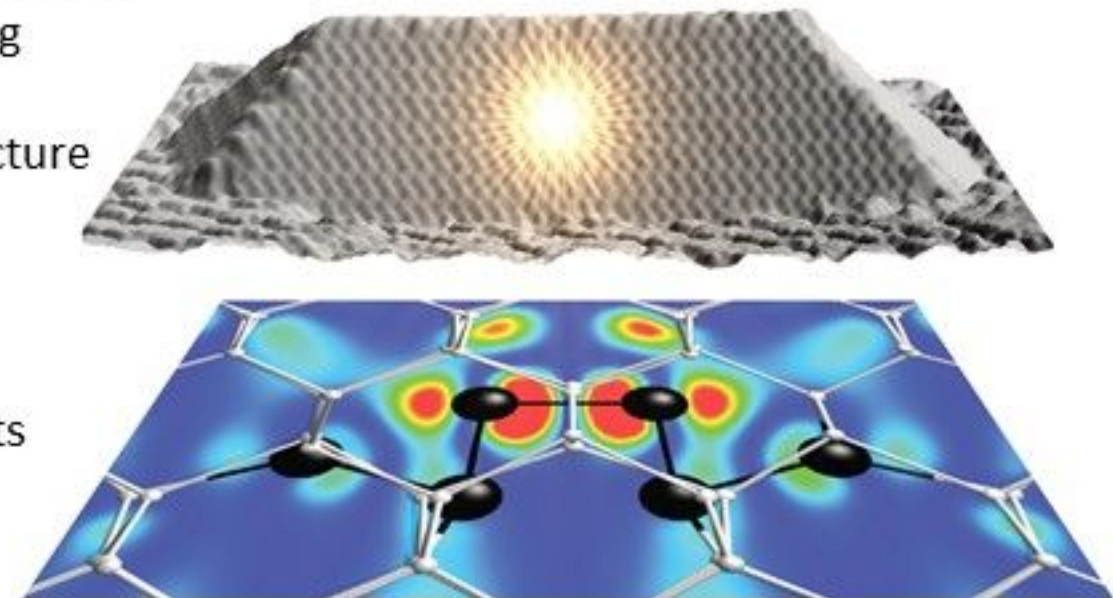


Master Thesis or PhD Thesis

„Optical Response of Silicon-Based Nanostructures“

- **Background:** Silicon photonics is a disruptive technology, poised to revolutionize areas like data centers, sensing, or high-performance computation by using CMOS-like fabrication methods.
- In the FWF START Project, we aim at gaining insights into defect-nanostructure interaction and investigate the influence on their optical and electrical response. The overall goal of the team is to create CMOS-compatible light sources based on epitaxial growth of nanostructures.
- **Your task:** Optical spectroscopy of group-IV defect-enhanced quantum dots using photoluminescence, time-resolved spectroscopy, magneto-PL, etc. Additional: fabrication of optical resonator devices using clean room technology, theoretical device simulation
- You are interested in teamwork in a highly competitive and upcoming research field?



Start: from Jan. 2020 on
Duration: Master thesis: 6-8 months; PhD thesis 3 years
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