Optical Communications (ZfT – Space, Bachelor/Master Thesis)

Motivation
The aim of this thesis is the evaluation of optical communication systems for small satellites. Mass, power, volume, and link budgets shall be prepared and the feasibility of optical links shall be evaluated, specifically in comparison to RF links. Additionally, a simplified test bed shall be implemented.

Tasks
- Research and comparison of existing and planned optical systems for small satellites
- Definition of HW/SW requirements (within CubeSat constraints)
- Budget calculations
- Test bed implementation and experiments

Experience
- Good with Google (mandatory)
- Programming (useful)
- Electronics (useful)
- Communications (useful)
- Experience with Radios/ADC+DAC/Antennas (useful)

Contacts
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