Vaishali Adya
adya@kth.se

Generation and detection of optical squeezed light

This project deals with optical cavity free generation of squeezed light at telecommunication wavelengths by using waveguides . You will be part of a research team and participate in a larger research project funded by the Swedish research council, Wallenberg Centre for Quantum Technology and the Göran Gustafson foundation. Your task will be to characterize the squeezing using homodyne and or heterodyne detection. The project also includes development of feedback control for polarization and control of the squeezing quadrature. You will be closely working with a group of PhD students and researchers. The results of this project will be used to develop the next generation of squeezed light sources for quantum sensing and communication.