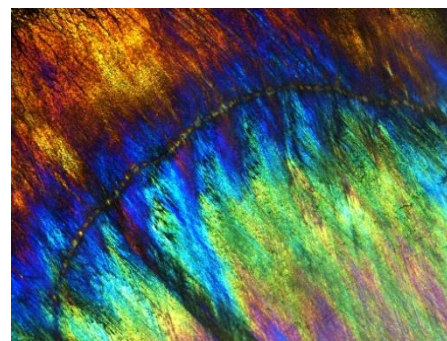
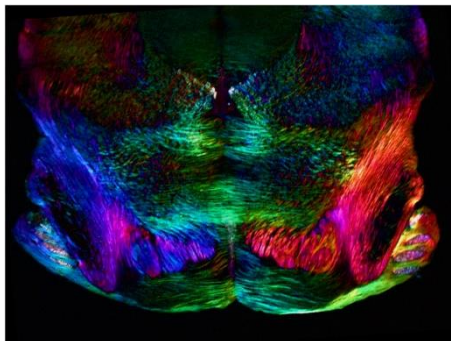
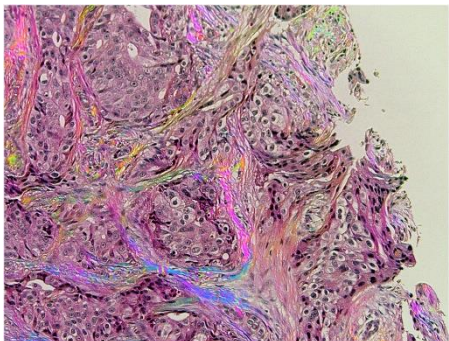


Quantum polarimetry for biomedical and technical metrology

- Biomedical metrology via quantum state tomography and classification with polarization-entangled photon pairs.
- Demonstration of quantum advantage of polarimetry with entangled photon pairs with respect to classical techniques.
- Fundamental studies for technical and biomedical metrology, especially for the influence of the entanglement degree, wavelength-degeneracy of the photon pairs, etc.



In the lab:

- Design and performance of the experiments on real samples with the existing instrument,
- Upgrade of the existing instrument for extra measurement modalities,
- Characterization of the instrument and establishment of the approach to the level of metrological standards,
- Development and realization of auxiliary measurement setups.

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