Scanning Near-field Magneto-Optic Microscopy - TU Eindhoven, Netherlands

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This research was aimed at developing an apertureless Scanning Near-field Magneto-Optic Microscope (apertureless SNMOM) with pico-second temporal and sub-wavelength spatial resolution. This device would aid in understanding the spin dynamics in small domains of ferromagnetic ultra-thin films. Our aperturless SNMOM achieves high spatial resolution by local light scattering from a nanometer-sized tip. It will measure the local magnetic field from the Faraday-rotation of polarized light passing through the sample.