

Topic	Magnetometry of quantum oxides
Topic is suitable for	<ul style="list-style-type: none"> • practical works of bachelor students • graduation thesis of bachelor students • practical works of master students • graduation thesis of master students
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Annotation	We investigate magnetic properties of various quantum oxides in form of a polycrystalline powder, single crystal, or thin film in temperature range of 2 – 400 K and under applied magnetic field up to 14 T. Next to bulk magnetometry it is possible to gain insight also into nuclear magnetic or quadrupole resonance (NMR/NQR) techniques and/or atomic and magnetic force microscopy (AFM-MFM).
Expectation for candidate	Interest for materials research and experimental condensed matter physics, successful passing in physics courses offered by TUT, careful and stable character, some programming (LabView, Python) and data analysis (Python, Origin) experience.