

## **Ma19 - Ultrafast Spin Hall Effect Probed by THz Spectroscopy**

### Physics:

- Ultrafast Spin Hall Effect
- Spintronic Terahertz Emission
- Femtosecond Magnetization Dynamics
- Linear and Nonlinear Optics
- Photoinduced Spin and Charge Currents

### Technical:

- Ultrafast Time Domain Terahertz Spectrometer
- Femtosecond Laser Oscillator
- Generation and Detection of Ultrashort Terahertz Pulses

### Data Analysis:

- Time and Frequency Domain Data Plotting
- Fast Fourier Transformation (FFT)
- Exponential Decay (Fits)