

## Ma 10 - Auger Spectroscopy and EELS

### Physics:

- Auger effect, Selection rules
- Auger spectroscopy, Electron inelastic mean free path
- Surface and Bulk Plasmons
- Orbital structure of Al
- Electron Energy Loss Spectroscopy (EELS)

### Technical:

- Ultra-high vacuum
- Lock-In Amplifier
- Cylindrical mirror analyser with integrated electron gun

### Data analysis:

- Identifying unknown Auger peaks and the corresponding elements
- Fitting of derivative spectra