

Ma 22 – Transport in graphene

Physics:

- Band structure of graphene
- Field effect transistor operation
- Electronic transport parameters: carrier mobility and scattering time
- Quantum effects in transport

Technical:

- Room and cryogenic temperature electrical measurements
- Lock-in amplifiers
- Four- vs. two-probe measurements

Data analysis:

- Linear and peak center fitting
- Noise vs. data identification
- Error sources in the data analysis