The aim of my project is to investigate whether one can prepare highly oriented pyrolytic graphite films by Pulsed Laser Deposition. One of the applications could be micro-scaled diamagnetic levitation, more specifically, the levitation of probes used in probe based storage.

The carbon films were deposited using the PLD facilities of the Superconductivity and Magnetism Division at the University of Leipzig using single crystal nickel substrates, while varying parameters such as substrate temperature and laser pulse energy.

One of the PLD chambers in Leipzig: