PhD position in thin-films dispersive optics

The Laboratory of Attosecond Physics (LAP) located at the Max Planck institute of Quantum Optics (MPQ) and Ludwig Maximilians University (LMU) in Garching, Germany is seeking for a PhD candidate to work on the topic of:

Development of high dispersive mirrors and their implementation

Since 60s, when the world has seen the first laser, the synthesis and production of multilayer dielectric coatings becomes to play an important role in the laser physics. A dielectric coating could provide much higher reflectivity in comparison to a metal mirror. Basing on successes in the multilayer coatings, laser physicists obtain shorter durations and higher intensities of pulses. One can notice that significant breakthroughs in the ultrafast physics in the past 20 years are associated with constitutive steps in the thin-films optics. One of constitutive steps, namely, the invention of chirped mirrors makes possible accurate phase control and generation of single-cycle optical pulse.

The candidate will join a team of researchers and is expected to substantially contribute to experimental work revolving around multilayer dispersive optics.

A candidate with diploma in physics and following qualification is required:

Good grades;

Knowledge in optics;

Knowledge in the field of thin-films optics is appreciated, but is not mandatory;

Expertise with high-vacuum equipment.

Interested candidates shall submit their CV, list of publications and the names and addresses of references to:

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