

Institute of Atomic Physics, Institute of Physics and Nuclear Engineering,
Theoretical Physics, Apoma Laboratory



SEMINAR



Extensive Light Investigations, Seminar, Series, IV

Charge Scattering by Laser Pulse

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Heavy ions scattering belongs to Nuclear Physics, focused laser beams belong to Laser Physics. This Seminar tries to bring them together.

Ion-ion scattering immersed in laser radiation is described by the Kroll-Watson cross-section. But high-power laser beams are focused, and ion-ion scattering is modified in focused beams.

In addition, a **new type of scattering appears**, which involves scattered ions by the laser focus. The two scattering processes, ion-ion in the laser focus and ion-laser focus may interfere.

If we would have a high-power laser and a good heavy-ions beam, then we may fire the laser and send the beam on the laser focus, collect the scattering data, and get a nice pattern of diffraction cross-section.

Such points are the subject of the Seminar.

**Thursday, February 15th, 2018, 12am,
Seminar Room, Department of Theoretical Physics**