Research and Development for the Enhancement of Laser-Compton Scattering X-ray Sources

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Nowadays, bright X-rays needed for advanced scientific research are generated at synchrotron facilities, which are too huge and costly for labs in universities, companies, and hospitals to handle. One candidate for a compact, powerful X-ray source is the laser-Compton scattering (LCS), also known as inverse Compton scattering. In LCS, laser photons are scattered by relativistic electrons, becoming high-energy X-ray photons.

In this seminar, study on the enhancement of LCS X-ray will be presented. The laser used in this study was a chirped pulse amplification (CPA) laser system with a Yb:YAG thin-disk regenerative amplifier as the main amplifier. Millijoule, picosecond pulses were generated.

When: Thursday **29. 9. 2022 – 14:30**

Where: Seminary room (Perla), HiLASE Centre

*\*) The seminar will be in Czech, if you are interested in the English version, a new date will be announced*.