

The Beams and Applications Seminar Series

Ultra-high Intensity Ti:Sapphire/KrF Hybrid Laser System*

Xiangyang Song

University of Illinois at Chicago (UIC).

Bldg. 401, rm B2100

Friday, September 30, 1:30 pm

Host: Y. Li, ASD

An updated ultrahigh-intensity femtosecond large-aperture KrF* ($\lambda=248$ nm) laser system are introduced in this presentation. The experimental measurements show the peak power of 4 terra watts with a pulse width of 150fs, output energy of 600 mJ, and the focal spot diameter of around 1.5 microns. This yields an average intensity of about 2×10^{20} W/cm², which is 10 times higher than the old system. Also, various applications of such high intensity laser at the Laboratory for X-Ray Microimaging are described.

For more information visit

<http://www.aps.anl.gov/asd/physics/seminar.html>

Visitors from off-site please contact Chun-xi Wang
(wangcx@aps.anl.gov, 630-252-4968) to arrange for a gate pass.

This ANL seminar series is a CARA activity and focuses on the physics, technology and applications of particle and photon beams. It is sponsored jointly by the ASD Division, the AWA group of the HEP Division, and the ATLAS group of the PHY Division.