

RADIATION PHYSICS SEMINAR

Electromagnetic processes in quasiperiodic motion at high energies.

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Time: Wednesday, December 9th, 13.15 to 14.00

Place: 1525-323

Abstract

Photon radiation and electron-positron pair production processes will be analysed in strong fields above Schwinger's limit. Two basic physical situations will be compared: channeling of ultrarelativistic electrons (positrons) in crystals and motion in the strong petawatt laser fields. The influence of external non-uniformity will be considered within the frame of author's approach. Lindhard's generalized method of virtual quanta will be discussed. High energy limits of electromagnetic processes will be presented.