



Семинар
«МАЛОЧАСТИЧНЫЕ СИСТЕМЫ»
вторник, 10 марта 2015 г., 11:00
аудитория им. Д.И.Блохинцева (IV этаж)

**LASER-ASSISTED ELECTRON MOMENTUM SPECTROSCOPY:
THEORETICAL FORMULATION,
POTENTIAL AND PERSPECTIVES**

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In the first part of the talk, general theory of the electron momentum spectroscopy (the $(e, 2e)$ method in the kinematics of quasielastic knock-out) is discussed. Regularization of the Born series for the scattering amplitude is considered. The validity of the plane-wave Born approximation is demonstrated.

The second part of the talk is devoted to the theoretical analysis of the electron momentum spectroscopy of an atomic target in the presence of laser radiation. A proper theoretical framework is outlined. The potential of the laser-assisted electron momentum spectroscopy is illustrated with numerical results for the case of atomic hydrogen embedded in a low-intensity laser field.