

FLAP collaboration: Status and perspectives

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The report is devoted to the promising direction of research at the linear electron accelerator LINAC-200 in the framework of the new collaboration FLAP (Fundamental and applied Linear Accelerator Physics) related with investigation of the basics of electromagnetic interactions, the nature of strong interactions in photoproduction of pi minus and eta mesons, as well as new applications, such as controllable generation of electromagnetic radiation by relativistic electrons using functional materials, investigation of the characteristics and controllable generation of Cherenkov, synchrotron, transition radiation with a frequency of up to GHz, interaction of beams of relativistic electrons with surface and corrugated structures, creation of secondary neutron beams for neutron radiography, and testing of new detectors for nondestructive beam diagnostics with high spatial and time resolution. The progress in the collaboration team formation and the recent results obtained in 2023 are specially mentioned.