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Laser polaraimeter at VEPP-4M

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At the VEPP-4M collider with the KEDR detector, precision measurements of the masses and lepton widths of the Y(1S) meson are planned. In this experiment, beam energy calibration will be carried out by the method of resonant depolarization using a laser polarimeter. The essence of the method is to determine the frequency of the resonant depolarization of the beam, which is related to its energy. The beam polarization is measured from the asymmetry of the Compton backscattering of circularly polarized laser photons on vertically polarized electrons. The report is devoted to the description of the laser polarimeter setup.

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