

A Non-Linear Beam Dynamics Experiments at VEPP-4M Storage Ring, A. KALININ, V. KISELEV, E. LEVICHEV, I. PROTOPOPOV, V. SAJAEV, V. SMALUK, BINP - The non-linear dynamics of transverse beam motion have been studied experimentally at the VEPP-4M electron-positron collider. The following aspects of non-linear beam behaviour were investigated: the dynamic aperture reduction due to chromatic sextupoles, the amplitude dependent tune shift, phase space trajectories, and nonlinear resonances. The results of the observations using different measurement techniques are presented.