

Positron sound waves and "cusp" soliton

Nodar Tsintsadze^a

E-mail: nodar.tsintsadze@tsu.ge

^a Physics Department, Faculty of Exact and Natural Sciences,
Tbilisi State University, Tbilisi 0179, Georgia

We show that in electron-positron-ion plasma with an imposed relativistic electromagnetic field, a new type of waves -- positron waves -- can propagate. We analyze nonlinear dynamics of these waves that gives rise to "cusp" soliton solution.