## DYNAMICS OF A NON-ROTATING TEST NULL STRING IN THE GRAVITATIONAL FIELD OF A CLOSED "THICK" NULL STRING RADIALLY EXPANDING OR COLLAPSING IN THE PLANE z = 0

O.P. Lelyakov, A.S. Karpenko, R.-D.O. Babadzhan

V.I. Vernadskyi Tavrida National University (4, Vernadskyi Ave., Simferopil 95700, Ukraine; e-mail: lelyakov@crimea.edu)

S u m m a r y

The dynamics of a test null string moving in the gravitational field of a closed "thick" null string radially expanding or collapsing in the plane z = 0 is considered, provided that the former string does not rotate initially.