ANALYSIS OF THE PROBE NULL STRING
MOTION IN THE GRAVITATIONAL
FIELD OF A CLOSED NULL STRING
WITH CONSTANT RADIUS

O.P. Lelyakov

V.I. Vernadskyi Taurida National University
(4, Vernadskyi Ave., Simferopol 95007, Ukraine;
e-mail: lelyakov@tnu.crimea.ua)

S u m m a r y

The exact solution of the equations describing the motion
of a probe null string in the gravitational field of a
closed null string with constant (in time) radius has been
obtained and analyzed. The closed null string is assumed
to move along the z-axis, being totally located in a plane
orthogonal to this axis.