

NONLINEAR DYNAMICS OF A UBITRON
OSCILLATOR WITH DELAYED FEEDBACK

V.A. Balakirev, A.V. Borodkin

National Science Center
“Kharkiv Institute of Physics and Technology”,
Nat. Acad. of Sci. of Ukraine
(1, Academichna Str., Kharkiv 61108, Ukraine;
e-mail: vabalakirev@mail.ru, avborodkin@rambler.ru)

S u m m a r y

The theory of a ubitron oscillator with delayed feedback has been built. The starting currents of the oscillator have been determined. The generation modes have been studied at various magnitudes of the relativistic electron beam current.