

PIC-SIMULATION OF WAKE FIELD EXCITATION
IN NONLINEAR MODE IN A CYLINDRICAL
DIELECTRIC RESONATOR

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A nonlinear mechanism giving rise to the restriction by amplitude of the wake field excited by a train of relativistic electron bunches in a cylindrical resonator partially filled with insulator has been simulated numerically. The resonance dependence of the wake field amplitude on the bunch repetition frequency in the train has been studied.