INFLUENCE OF PARTIAL NEUTRALIZATION OF BUNCH SPACE CHARGE ON DIAGNOSED PARAMETERS OF ION BEAMS

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The theoretical and numerical analysis of the effect of partial neutralization of beams, as a result of ion bunches capture free electrons, which are formed during the ionization of multicomponent residual gas of the vacuum chamber are performed. Experimental and calculating results for ion beam Ar1⁺ at parameters typical for HF-accelerators are well coordinated.