

On Energy Equipartition Induced by Space Charge in Bunched Beams, J.-M. LAGNIEL, S. NATH*, CEA-SACLAY - Space-charge interactions in high-intensity linear accelerator can lead to equipartitioning of energy between the longitudinal and radial degrees of freedom. This can be a source of emittance growth and halo formation. Equipartitioning phenomena is analysed. The excited coupling-resonances are described as a function of both beam and accelerator parameters.

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