

Abstract

One of the main issues in designing and constructing an accelerator is the choice of frequency. In case of LINAC4 at CERN existing LEP klystrons were a big motive to choose the same frequency as of LEP, 352.21MHz. Since all of LEP klystrons were (will be) used in LINAC4 there will be a freedom in selecting another frequency, an integer multiple of LEP frequency called harmonic, for SPL. To name a few frequency jump may induce particle loss, emittance increase and halo formation if not done properly. Here I summarize three options for the LEP frequency scheme, all possible from RF point of view.