

SPATIALLY PERIODIC RF QUADRUPOLE LINAC

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IONS 1 / 3
30 - 50 mA
4.7-12.2 MeV
2.5 MeV/m
81.36 MHz
490 kW
2.0 Kilpatrick

- Flexible focusing lattice FODO-RFQ (focusing period $S = 5\beta\lambda$)
- High accelerating efficiency because of modulated quadrupoles and drift tubes
- Dipole modes are totally suppressed by inter-vane coupling with drift tubes
- Low RMS emittance growth < 25 %
- Simple mechanical design

