

SPATIALLY PERIODIC RF QUADRUPOLE LINAC

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10 NS 1/3

30-50 mA

4.7-12.2 MeV

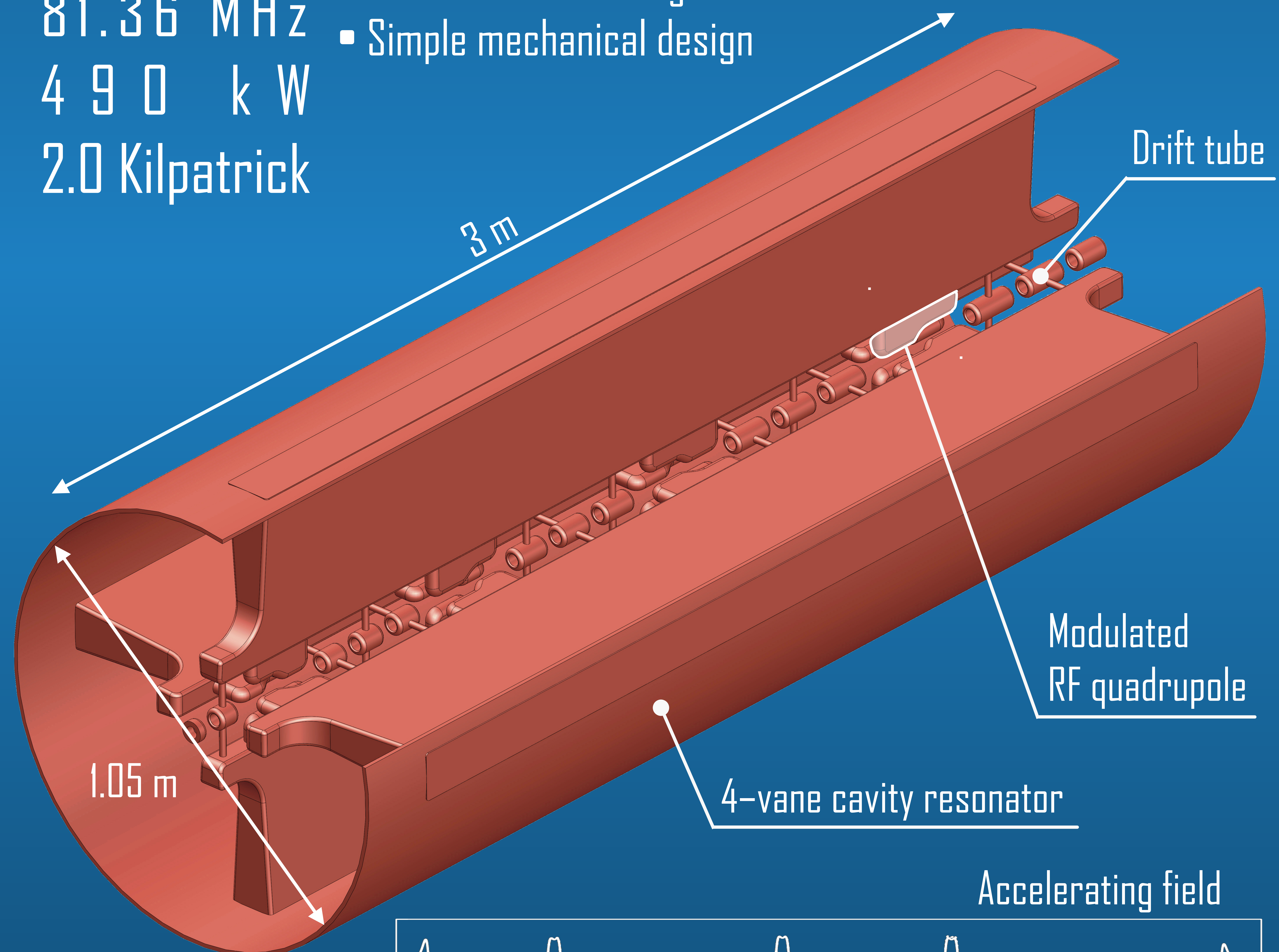
2.5 MeV/m

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



Accelerating field

