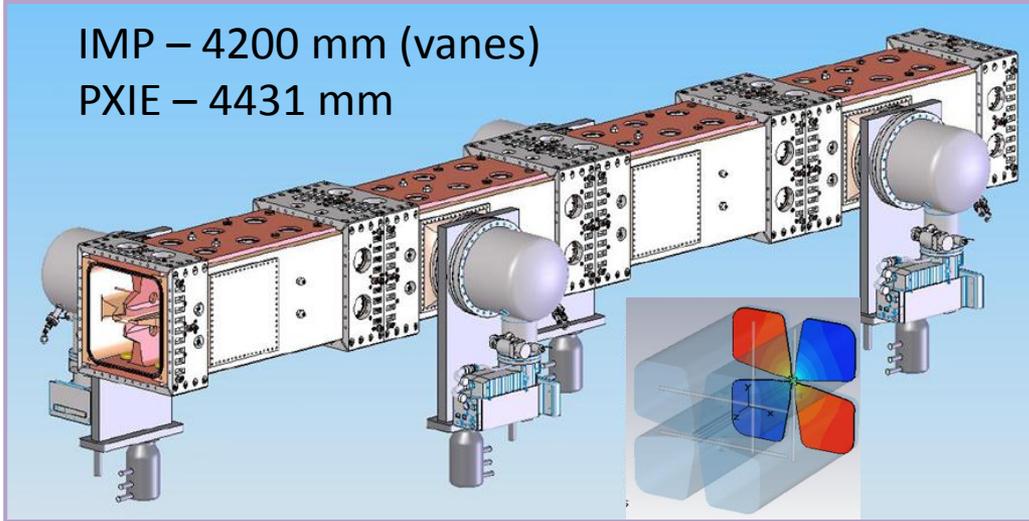


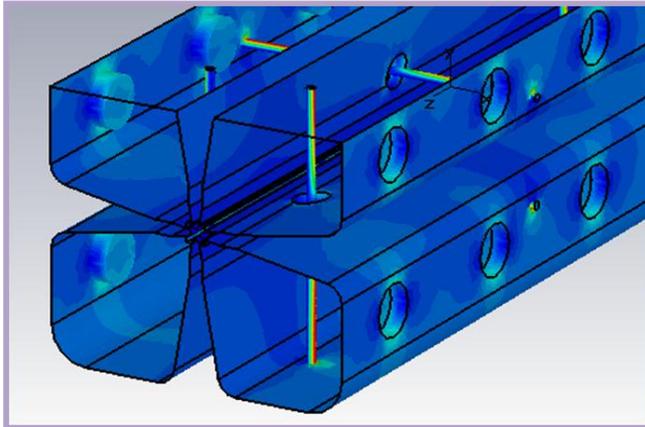
PXIE RFQ power requirements

IMP – 4200 mm (vanes)
PXIE – 4431 mm

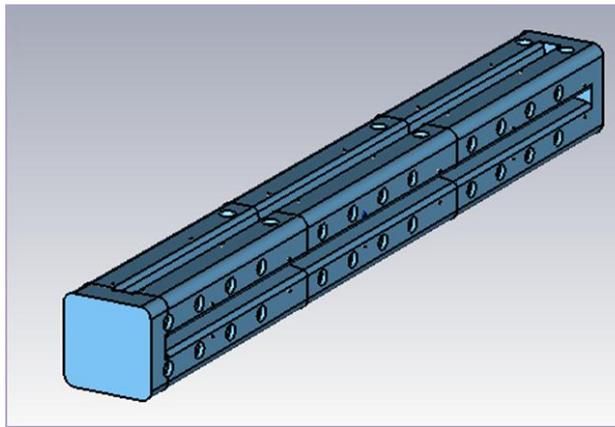


LBNL conceptual design for PXIE is close to IMP RFQ

- Vane length 4386 mm
- Four modules of equal length
- 80 tuners
- 8 vacuum ports
- 2 power coupler ports
- 32 PISL rods



Power losses distribution in the central section. Main contributors: walls, PISLs, tuners.



$Q_0 = 16900$
 $Q = 15170$ PISLs added
 $Q = 14520$ tuners added

Full length RFQ power consumption ≈ 70 kW,
+20% - standard overhead for conditioning and unexpected losses
+10% due to simulation errors (perfect copper, perfect shapes etc)

Total: ≈ 91 kW