

# Combined Function Skew Quadrupole Cell Principle

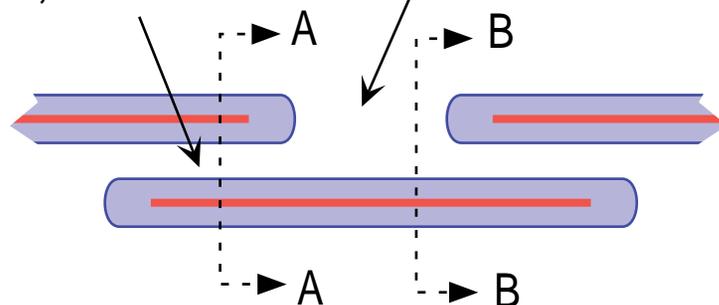
Superconducting coils are in independent flat cryostats which are longitudinally staggered.

## Plan View



Full coil overlap gives the full field,  $B = 7 \text{ T}$ , but  $G=0$

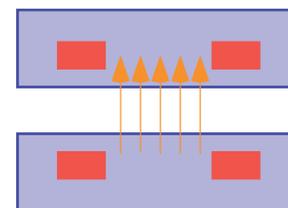
Single coil for half field,  $B = 3.5 \text{ T}$ , but  $G=20 \text{ T/m}$



## Elevation View

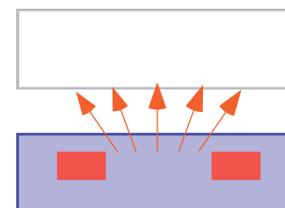
Net result is to use space which is normally wasted between coil ends.

## Section A-A



$B = 7 \text{ T}$   
 $G = 0 \text{ T/m}$   
No skew

## Section B-B



$B = 3.5 \text{ T}$   
 $G = 20 \text{ T/m}$   
Skew Quad