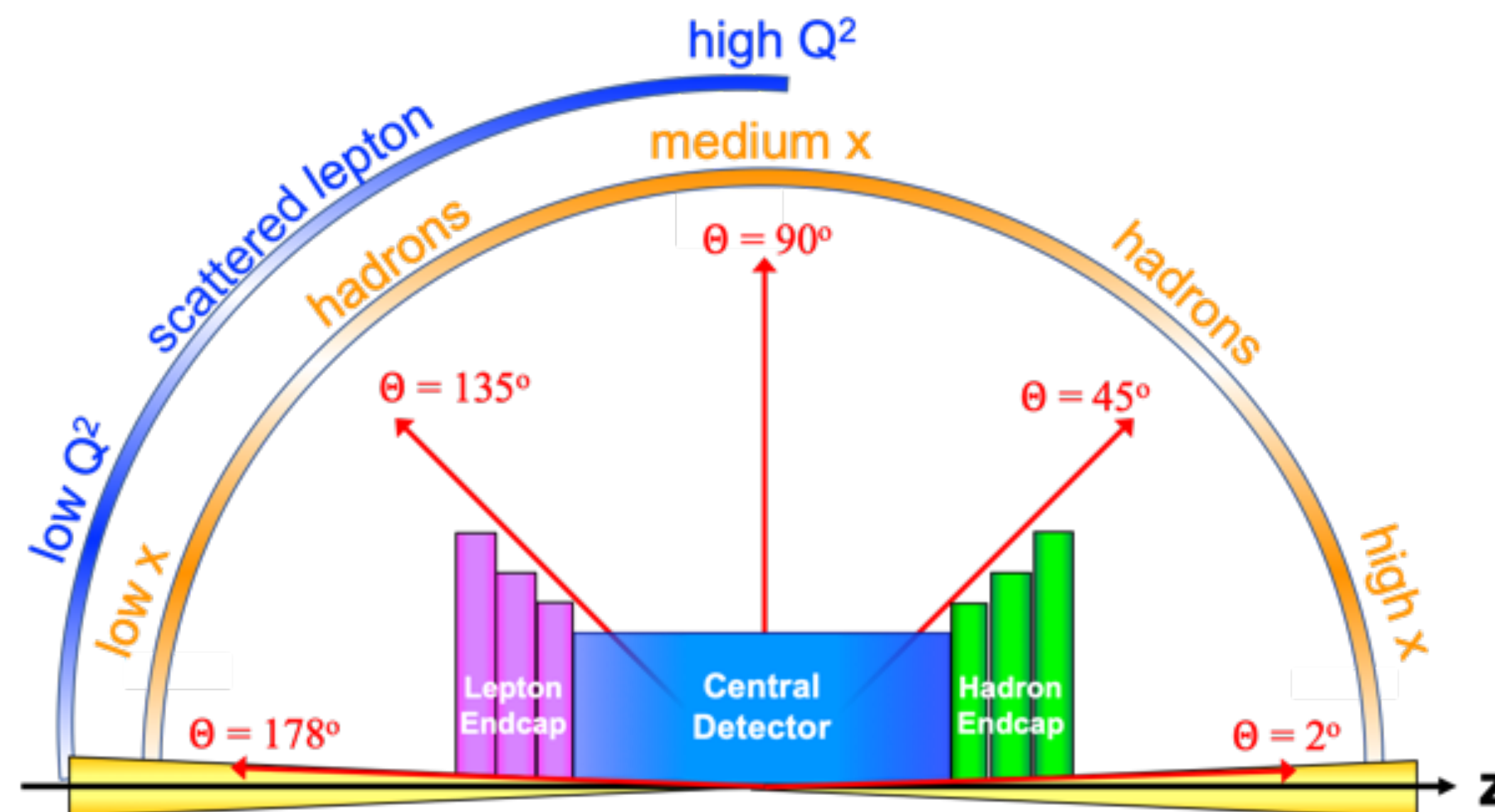


TDR Figures

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ePIC Tracking Resolution Requirements



	Momentum Resolution	Spatial Resolution
Backward (-3.5 to -2.5)	$\sim 0.10\% \times p \oplus 2.0\%$	$\sim 30/p_T \mu\text{m} \oplus 40 \mu\text{m}$
Backward (-2.5 to -1.0)	$\sim 0.05\% \times p \oplus 1.0\%$	$\sim 30/p_T \mu\text{m} \oplus 20 \mu\text{m}$
Barrel (-1.0 to 1.0)	$\sim 0.05\% \times p \oplus 0.5\%$	$\sim 20/p_T \mu\text{m} \oplus 5 \mu\text{m}$
Forward (1.0 to 2.5)	$\sim 0.05\% \times p \oplus 1.0\%$	$\sim 30/p_T \mu\text{m} \oplus 20 \mu\text{m}$
Forward (2.5 to 3.5)	$\sim 0.10\% \times p \oplus 2.0\%$	$\sim 30/p_T \mu\text{m} \oplus 40 \mu\text{m}$

- Geometric coverage (acceptance) of detection surfaces
- X/X_0 per detection surface

- Spatial and timing resolution of detection surfaces

- Radiation (background) environment and occupancies
- Seed validation

- Momentum resolution
- DCA resolution
- Track efficiency and purity

- Angular resolutions into PID subsystems

- Redundancy (missing detection surfaces)
- Effects of misalignments (and deformations)