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COMPATIBILITY OF COLLIDER B PHYSICS WITH A FULL ACCEPTANCE DETECTOR?

GOAL: COVERAGE OF ± 12 UNITS OF RAPIDITY
WITH NO INTERFERENCE BETWEEN DETECTOR
ELEMENTS.

THE BEAMPIPE PROBLEM: FOR $17/26$,
A STRAIGHT PIPE PRESENTS ≈ 1 INTERACTION
LENGTH.

\Rightarrow USE A FLARED PIPE AT FORWARD ANGLES

BUT, A MAGNETIC FIELD WITH KICK ~ 1 GeV/c
PRIOR TO THE FLARE THROWS PARTICLES INTO
THE FLARE OVER $\Delta\eta \sim 1$.

\Rightarrow ONLY SOLENOIDS, QUADRUPOLES, SEXTUPLES...
IN THE CENTRAL REGION (BJORKEN)

CENTRAL DIPOLES ARE SOMEWHAT INCOMPATIBLE
WITH FAR-FORWARD COLLIDER DETECTORS.