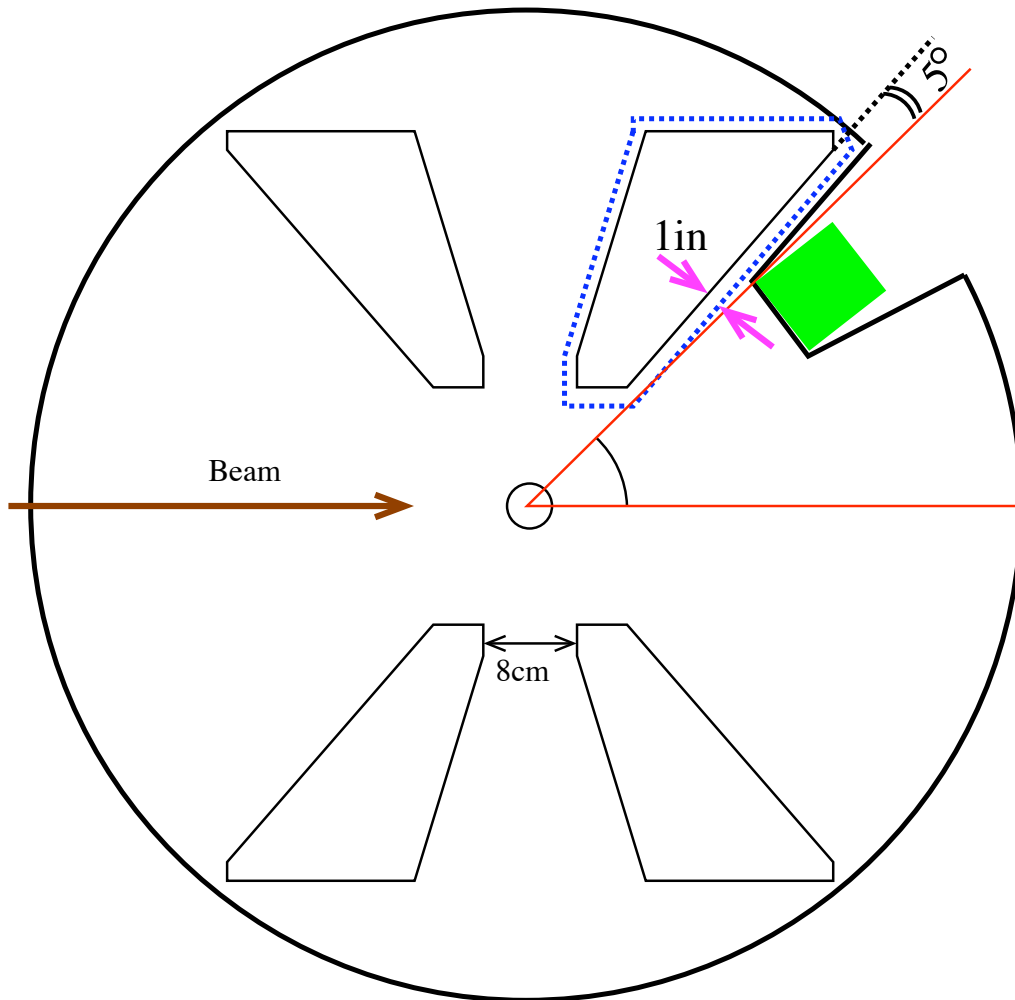# Update on Target Vacuum Can

Shigeyuki Tajima

Jan. 14, 2005

- Design of OVC for SANE and Semi-SANE

- Need to decide the shape of target can

- Need to determine window locations and dimensions

Shape of Target Can:
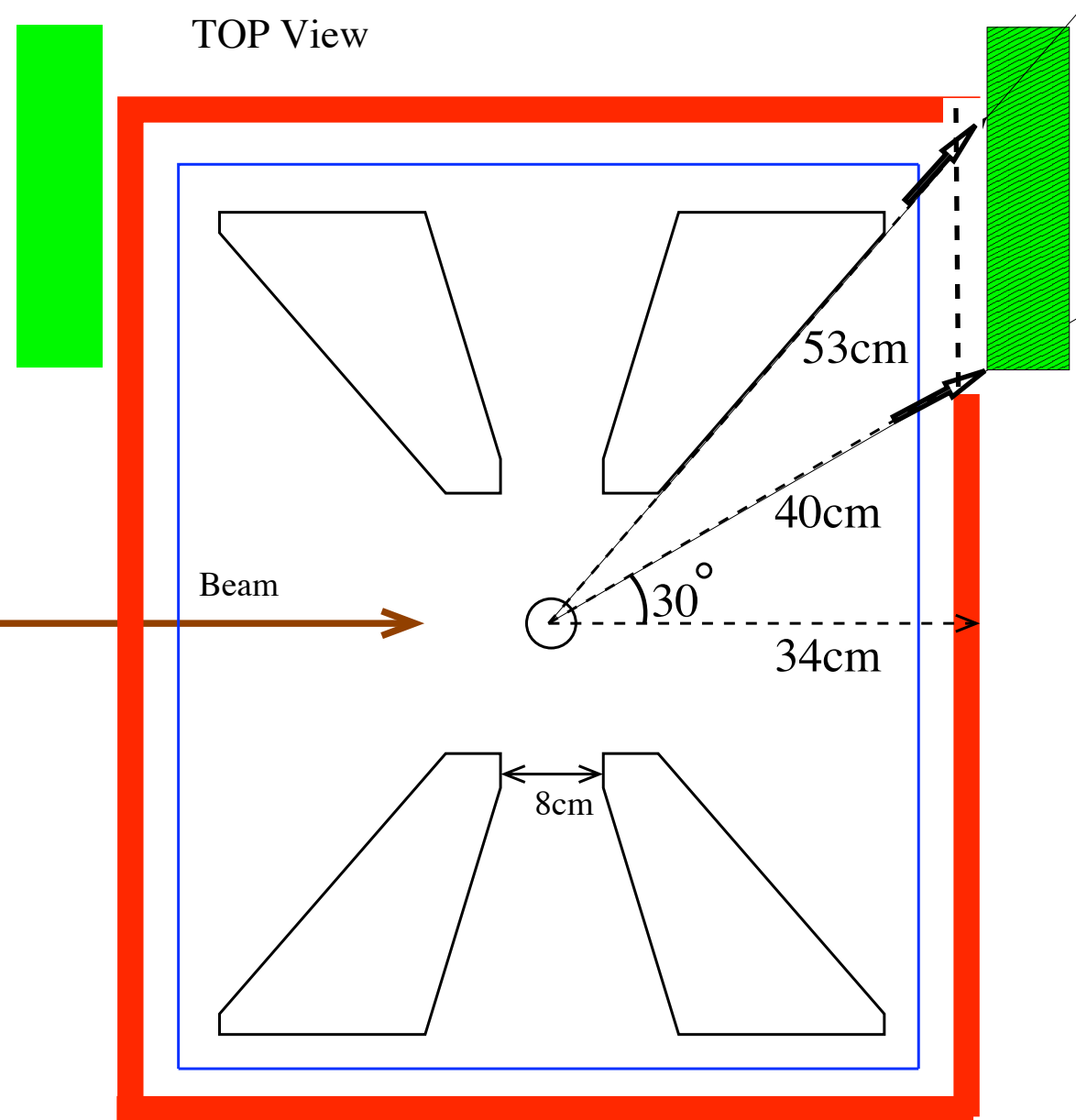# Option A: Re-entrant Cone

TOP View

5°

1in

Beam

8cm

- BETA acceptance is reduced by at least 5° due to insulating material around the coil (1-in thick) and re-entrant wall
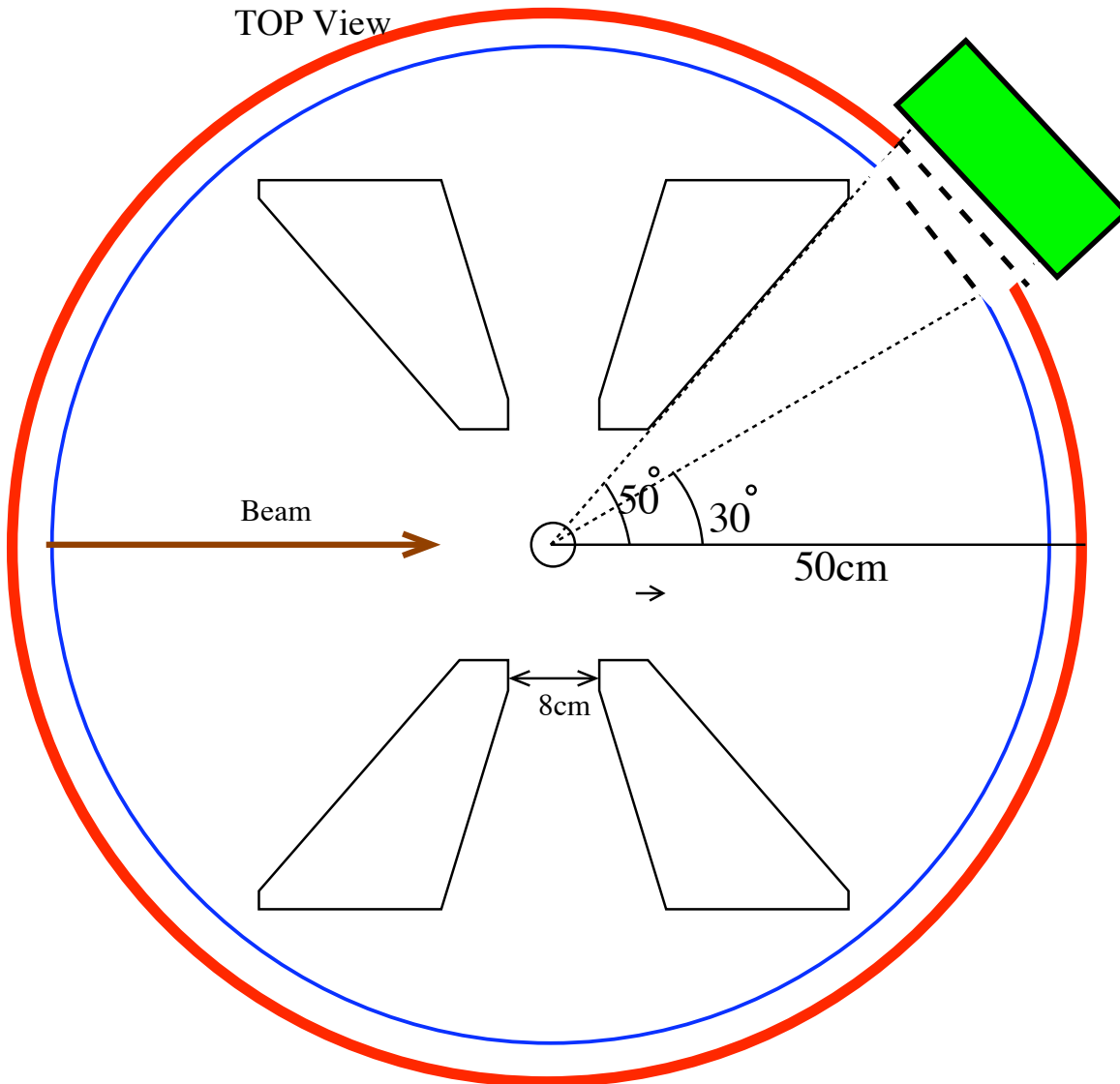
Shape of Target Can:
Option B: Square Can

TOP View

53cm

40cm

30°

Beam

34cm

8cm

- Outer wall will be very thick

- Distance from the target varies (about 40 cm to 53 cm)

- Position resolution not uniform over the detector
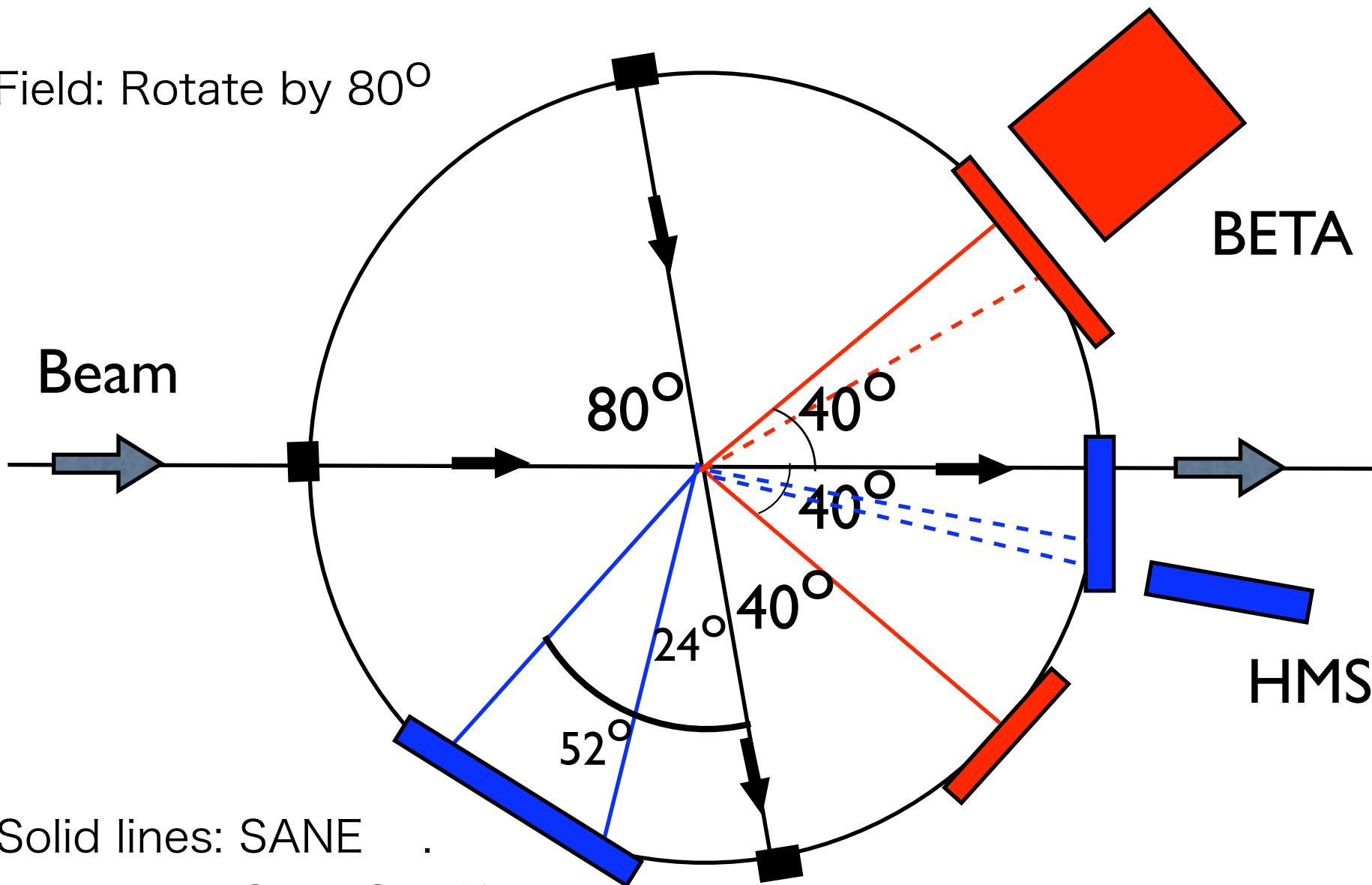
Shape of Target Can:
Option C: Cylindrical can

TOP View

Beam

50°

30°

50cm

8cm

- Distance from the target to the detector: ~50 cm

- Most reasonable shape

Target Window Openings
(Preliminary)

⊥ Field: Rotate by 80°

Beam

80°

40°

40°

40

40°

24°

52°

BETA

HMS

Solid lines: SANE .

Dashed lines: Semi-SANE

Window locations and dimensions
(Preliminary)

- Window dimensions estimated using a ray-trace program

- Beam entrance/exit, HMS, BETA