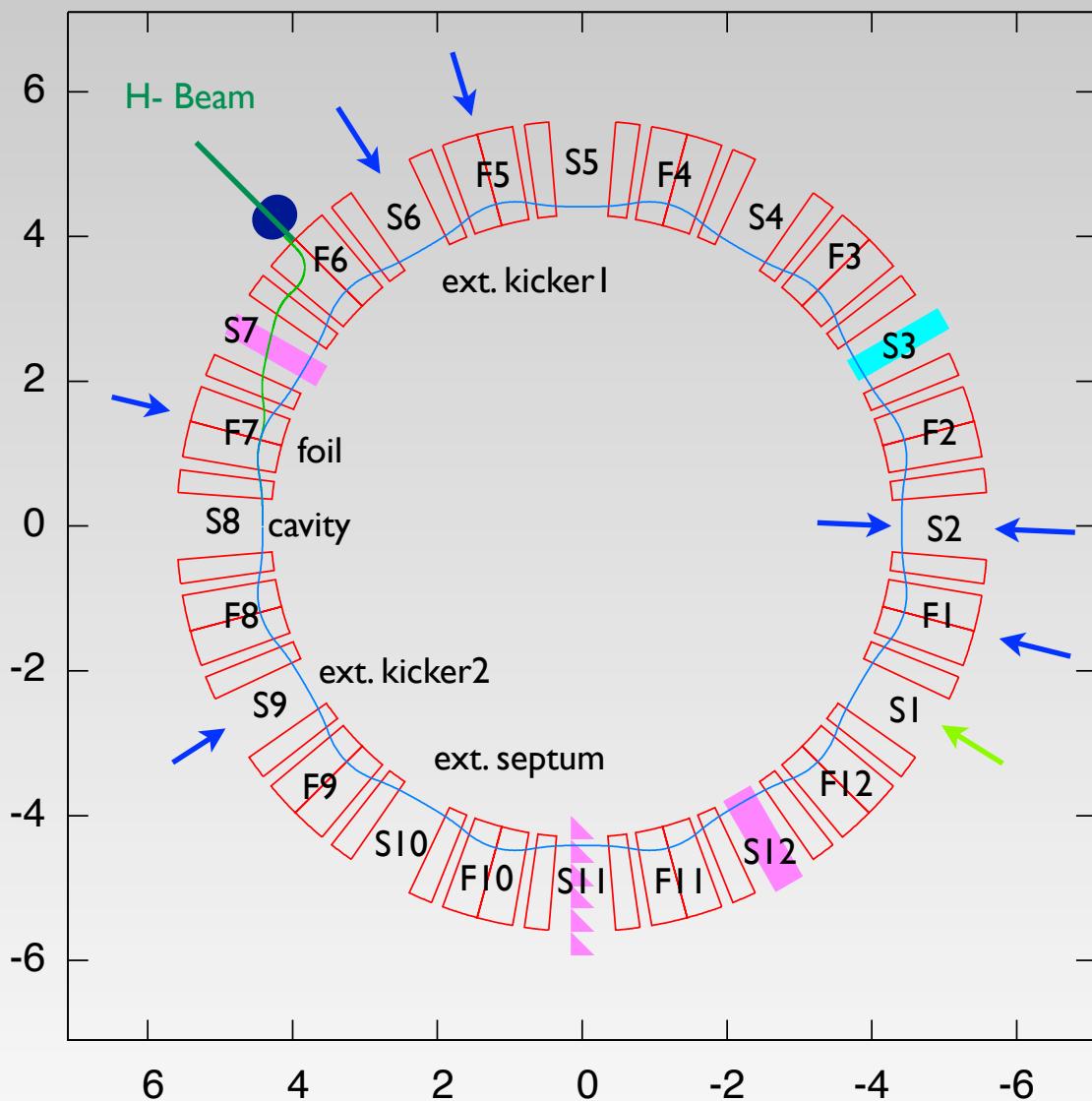


Available Monitors in ADSR-FFAG Ring



List of monitors

7 ports for radial probes (blue arrow, ICF70)
 4 portable radial probes remote cntrl'd
 2 portable radial probes manual cntrl'd
 1 unportable radial probe (green arrow)
 3 bunch monitors
 1 faraday cup / 1 screen monitor
 1 perturbator

S1	radial probe
F1	radial probe
S2	radial probe / hor. perturbator
S3	vert. perturbator
F5	radial probe
S6	radial probe
(F6)	Faraday cup / screen monitor
S7	bunch monitor
F7	radial probe
S9	radial probe
S11	bunch mon. (array of triangle plates)
S12	bunch monitor

Injection Studies in ADSR-FFAG Ring

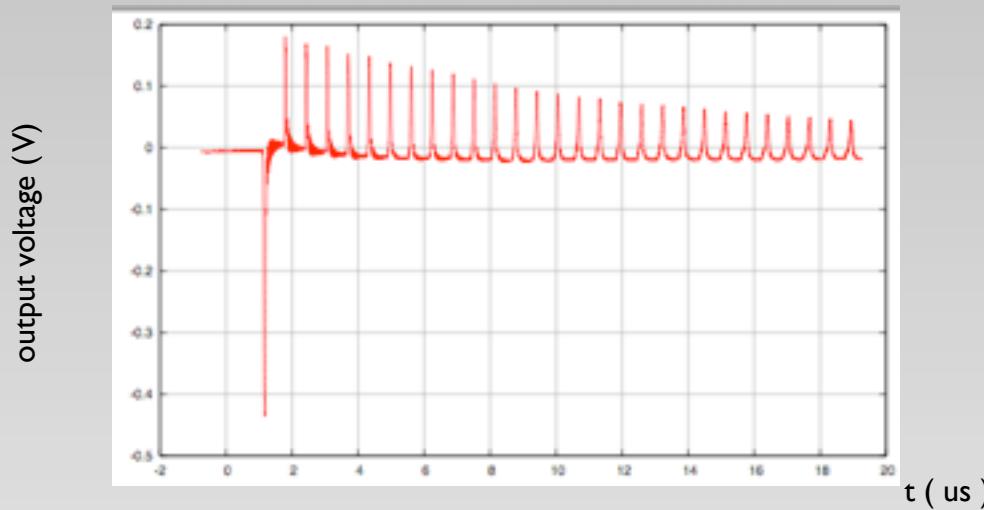


Fig1 : Beam signal from the bunch monitor at S7

Bunch monitor signal is amplified by preamp ($\times 200$ $Z_{in} = 1M\Omega$). In the Straight section S7, the monitor can detect both H- and H+ beam.

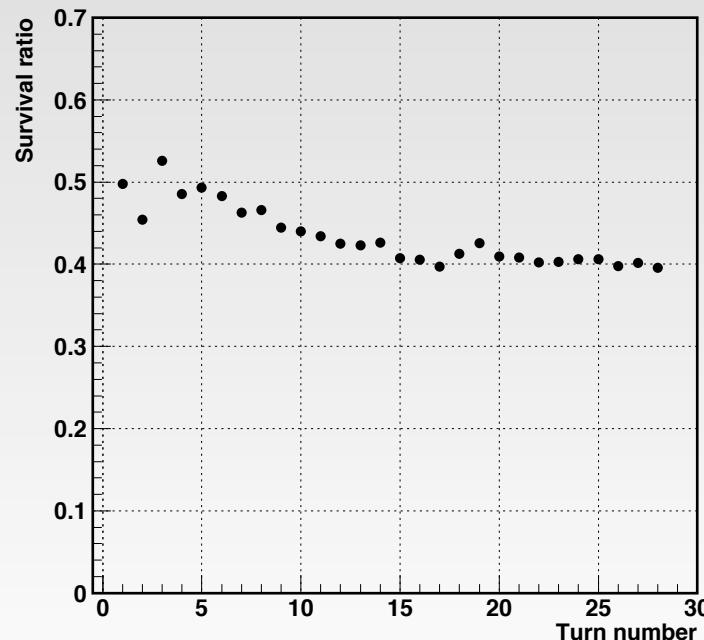


Fig2 : Survival ratio vs turn number

From the bunch signal in Fig1, survival ratio for each turn is calculated as

$$\text{Survival ratio} = \frac{\text{Bunch Area of } i\text{-th turn}}{\text{Bunch Area of 0-th turn}} .$$