TIMING SYSTEM
STATUS AND DEVELOPMENT

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MAXIV LABORATORY

MPS flow of SR1 and SR3 general block diagram.

LINAC Trigger Selector

MPS monitors
SR1 and SR3 current
blocking overinjection
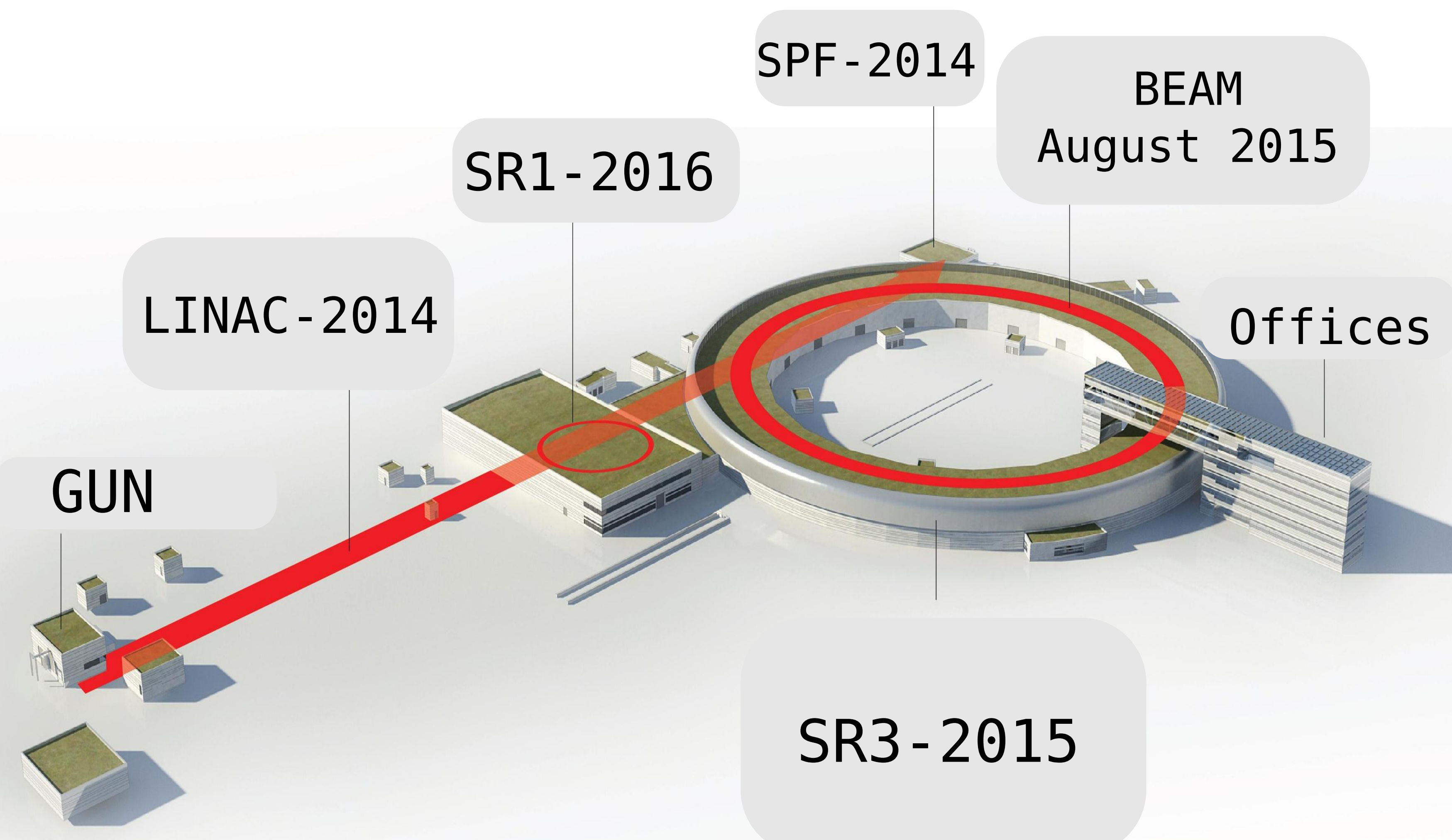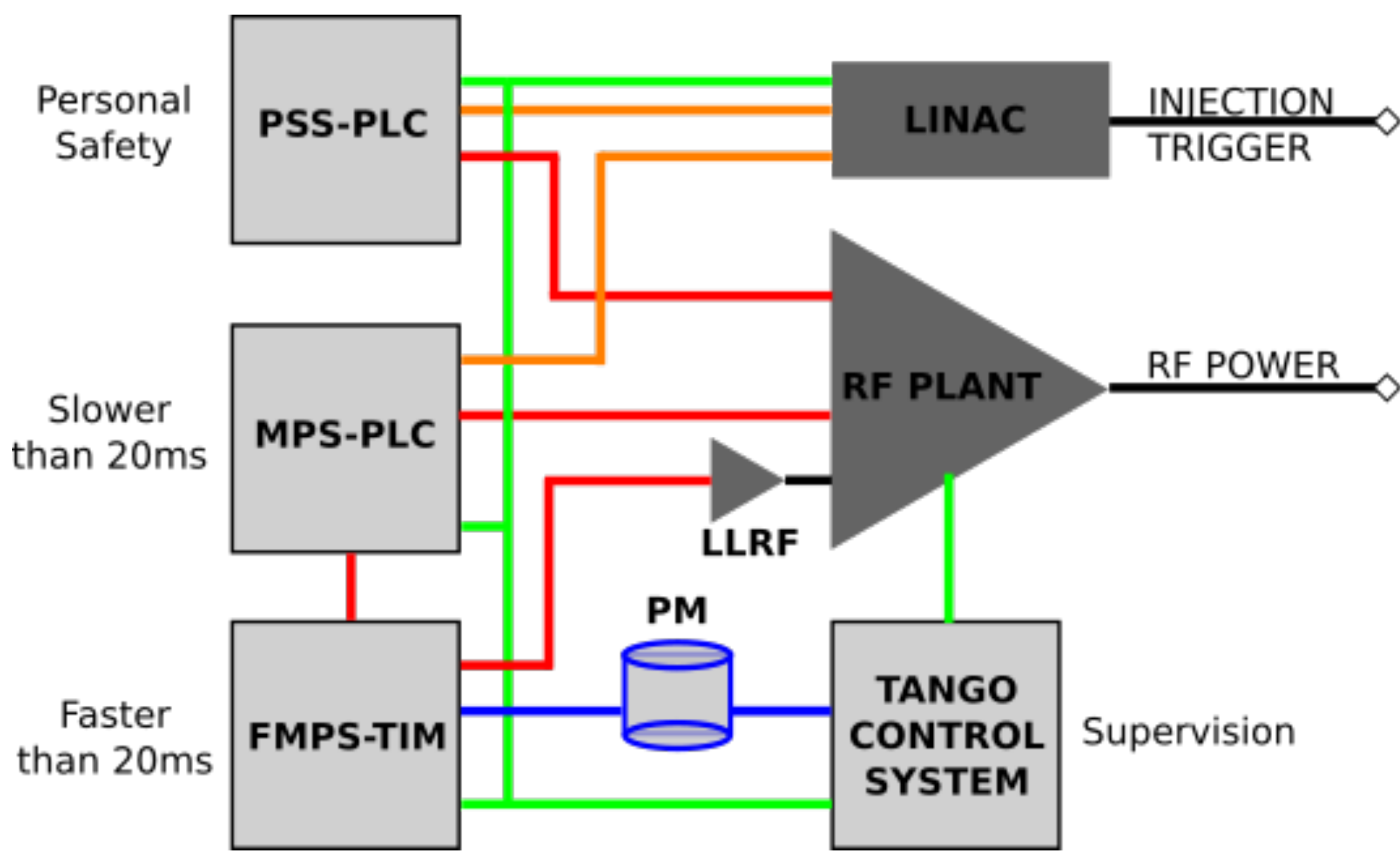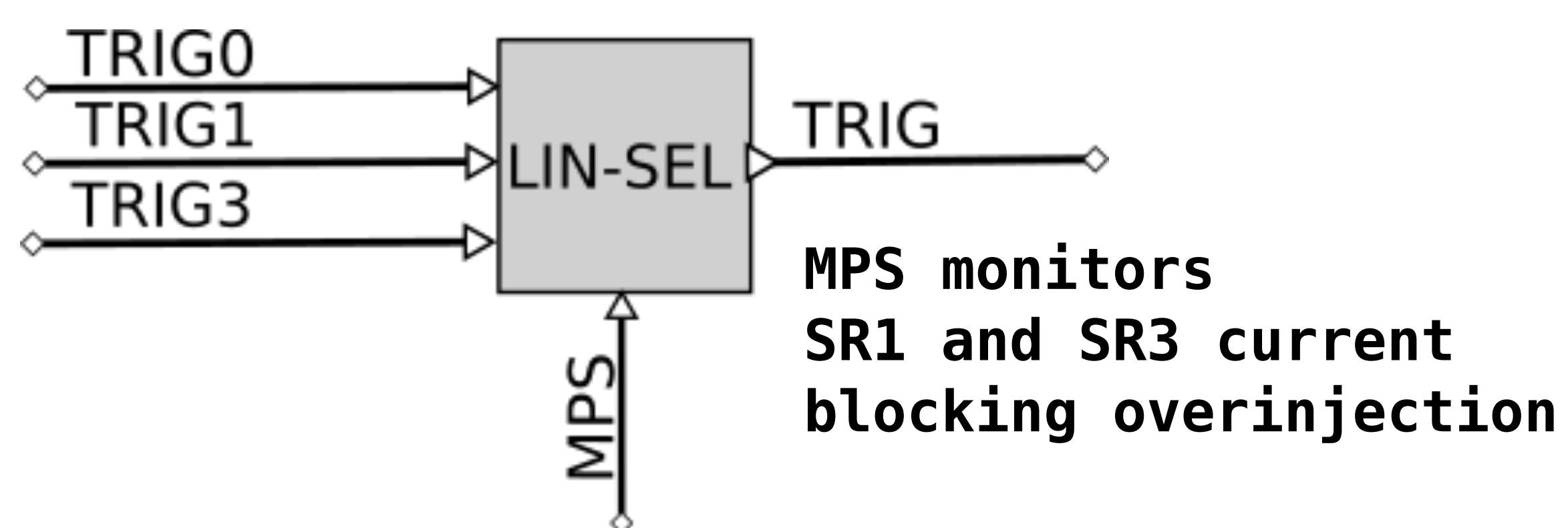
LIN and SPF — TRIG0 (3GHz, 77MHz, 50Hz)
SR1 — TRIG1 (100MHz, 3.12MHz, 50Hz)
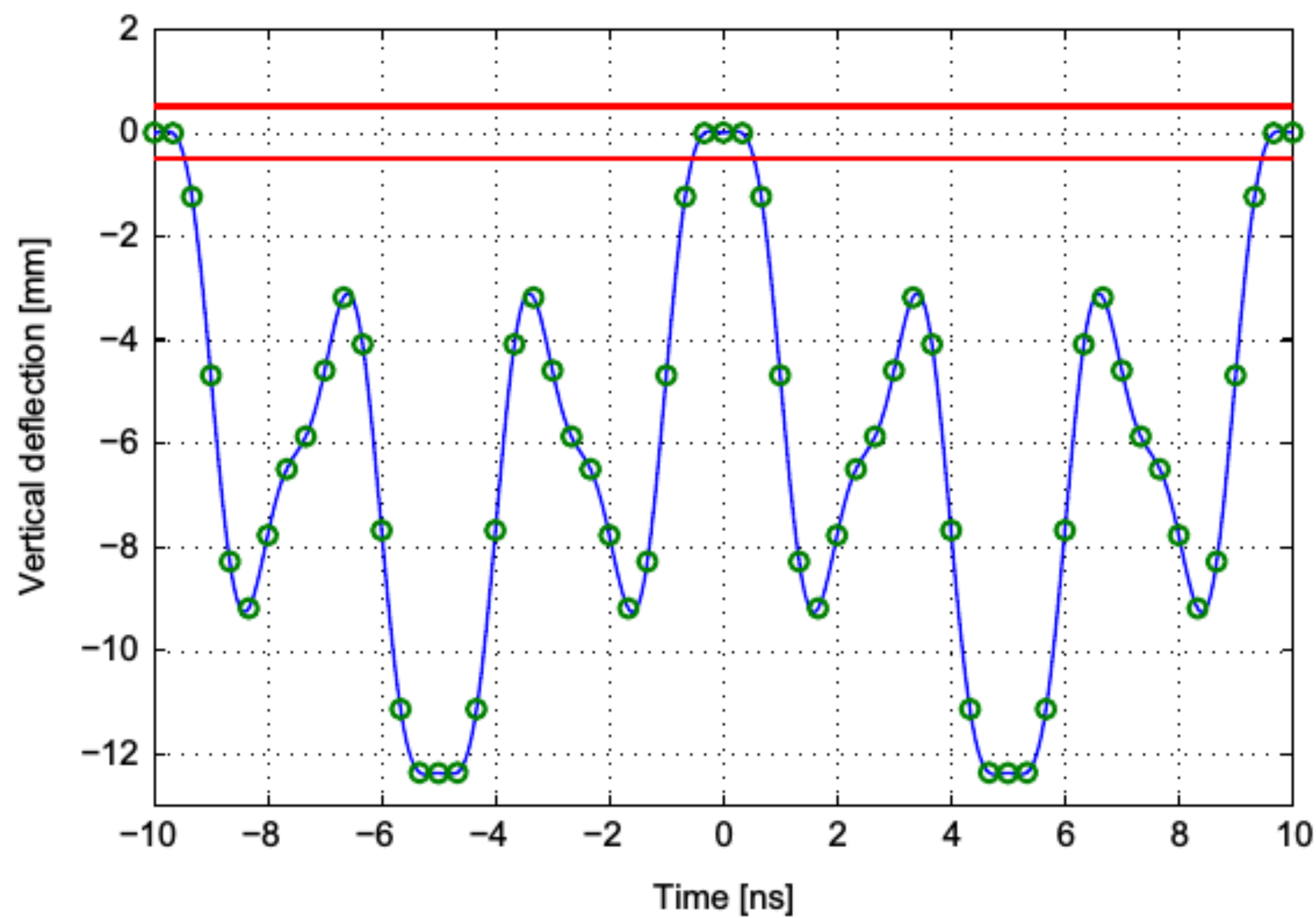SR3 — TRIG3 (100MHz, 568kHz, 50Hz)

MAX IV will work in 4 different modes:
LINAC 3GeV (LIN)
LINAC 3GeV + Short Pulse Facility (SPF)
LINAC 3GeV + Storage Ring 1.5GeV (SR1)
LINAC 3GeV + Storage Ring 3GeV (SR3)

LIN and SPF are rated for
100Hz injection whereas SR1 and SR3 for 10Hz.

Future LINAC trigger upgrade
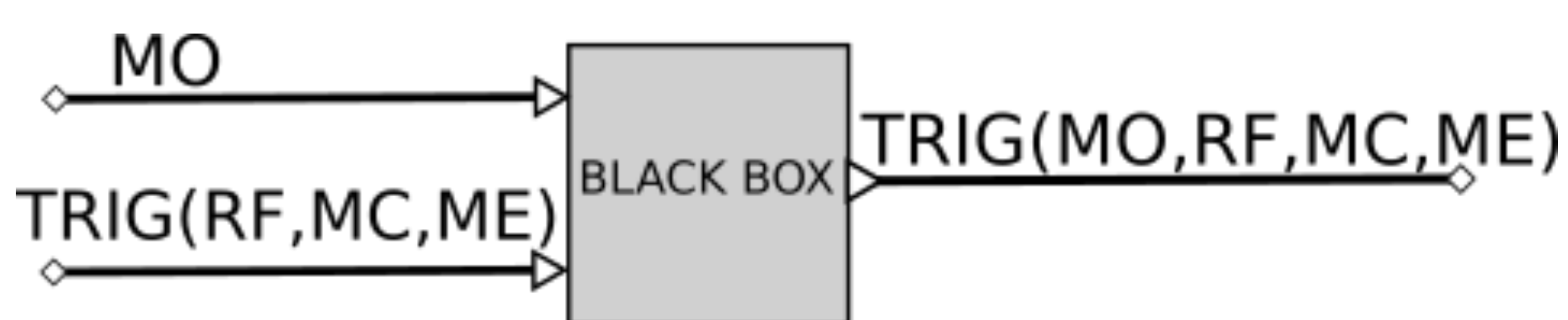
LINAC chopper selection of 3x330ps electron bunches

TRIG(RF,MC,ME) = SR injection from
2x up to 3.5x bunch per SR bucket

TRIG(MO,RF,MC,ME) = SR injection exactly
3x bunch per SR bucket

MAX IV state grid presenting TANGO "States"

**TIM and DIA/BPM columns present
the timing system integration**

Sub-field of "Global TIM"