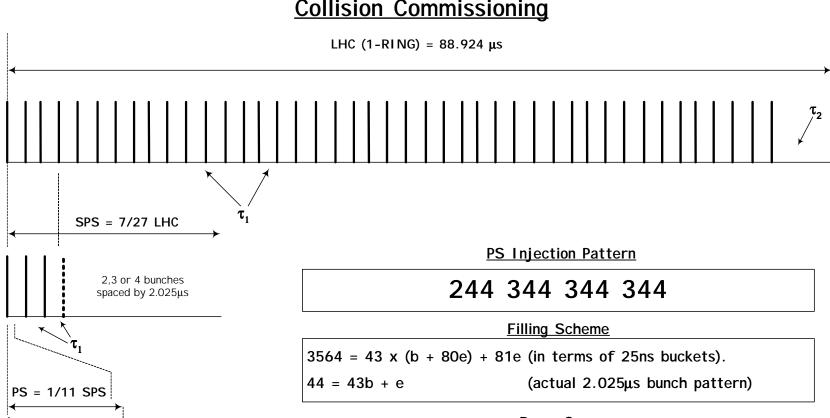
## Proton Bunch Pattern in the LHC for Totem Operation and for Initial Collision Commissioning



Single Bunch

in the PS

## Beam Gaps

 $\tau_1$  = 80x 25ns gap between adjacent bunches (2.025 $\mu$ s).

 $\tau_2$  = 1 missing bunch for beam dump kicker rise time (4.050μs).