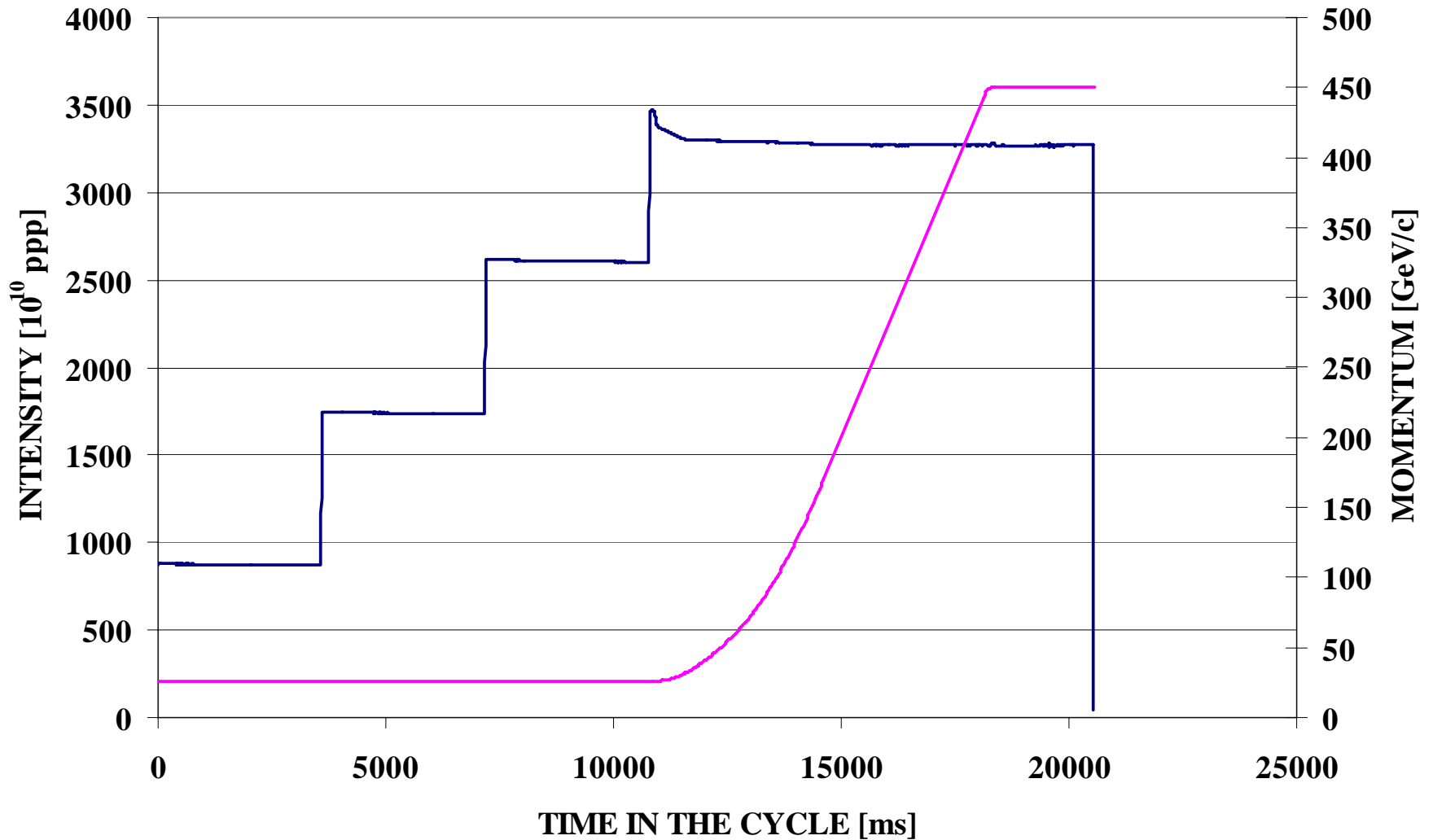


6 PS TSTLHC CYCLES IN THE SPS INSTEAD OF 4 PS LHC CYCLES?

G. Arduini and E. Métral

- ◆ **Result at the end of 2004** $\Rightarrow 4 \times 72 = 288$ bunches with $1.15E11$ p/b ($\sim 3.3E13$ p at 450 GeV/c). There are 3 gaps in the bunch train of 225 ns each (minimum for the SPS injection kicker)
- ◆ **In 2006, the maximum obtained** is $4 \times 72 = 288$ bunches with $\sim 0.6-0.7E11$ p/b (due to a PS H instability) $\Rightarrow \sim$ Half nominal intensity
- ◆ **Proposition:** $6 \times 48 = 288$ bunches with $1.15E11$ p/b ($\sim 3.3E13$ p) \Rightarrow In this case the bunch train will be longer by $2 \times 225 = 450$ ns \Rightarrow This could be used for the collimator tests (see last APC)
- ◆ **What would happen in the LHC with such bunch trains? What about beam-beam?...**

Result at the end of 2004



Best case on 17/10/06

