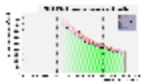
HI results with sensors in P2 & P8

Details for fill 2341

	Fill	Start Date Stable Beams	Duration Stable Beams [hh:mm]	Energy	Scheme	ATLAS Peak Lumi [Hz/ub]	ATLAS Delivered Lumi [nb^{-1}]	ALICE Peak Lumi [Hz/ub]	ALICE Delivered Lumi [nb^{-1}]	CMS Peak Lumi [Hz/ub]	CMS Delivered Lumi [nb^{-1}]	LHCb Peak Lumi [Hz/ub]	LHCb Delivered Lumi [nb^{-1}]
	2341	10:48 04.12.2011	3:08	3500	358_356_336_0	502.6	3796.4	395.7	3202	431.3	3332.3	0	0

Details for fill 2342

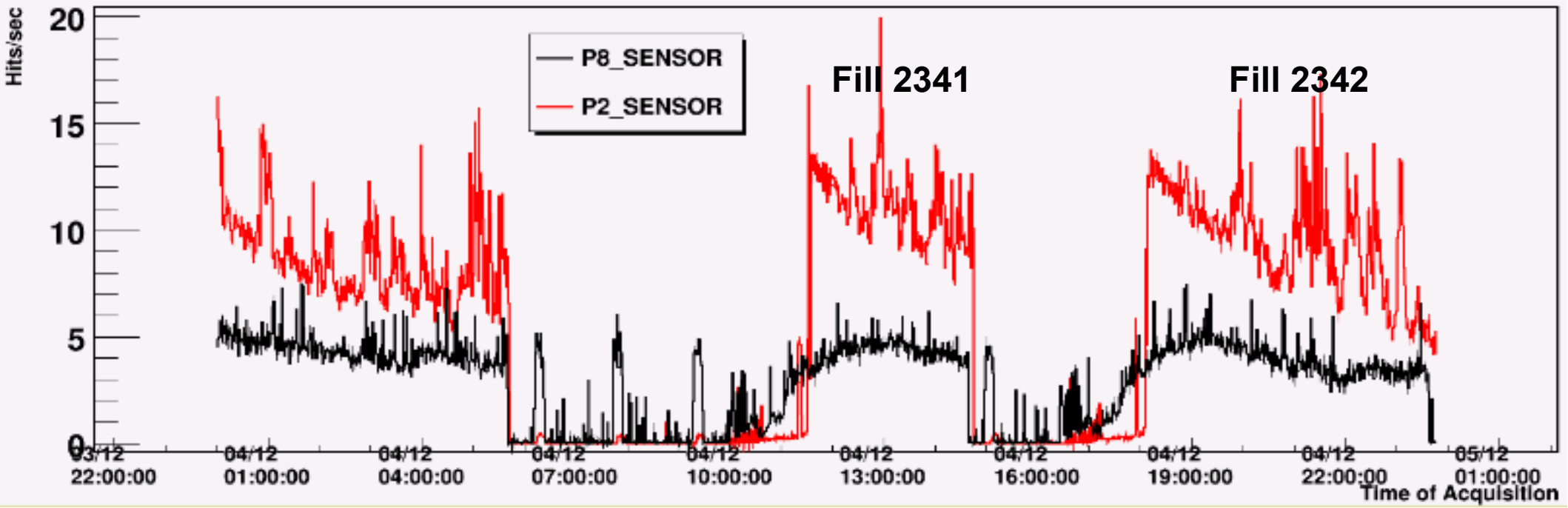
	Fill	Start Date Stable Beams	Duration Stable Beams [hh:mm]	Energy	Scheme	ATLAS Peak Lumi [Hz/ub]	ATLAS Delivered Lumi [nb^{-1}]	ALICE Peak Lumi [Hz/ub]	ALICE Delivered Lumi [nb^{-1}]	CMS Peak Lumi [Hz/ub]	CMS Delivered Lumi [nb^{-1}]	LHCb Peak Lumi [Hz/ub]	LHCb Delivered Lumi [nb^{-1}]
	2342	17:26 04.12.2011	5:34	3500	358_356_336_0	514.4	5682.8	397.5	4795.9	434.8	5071.4	0	0

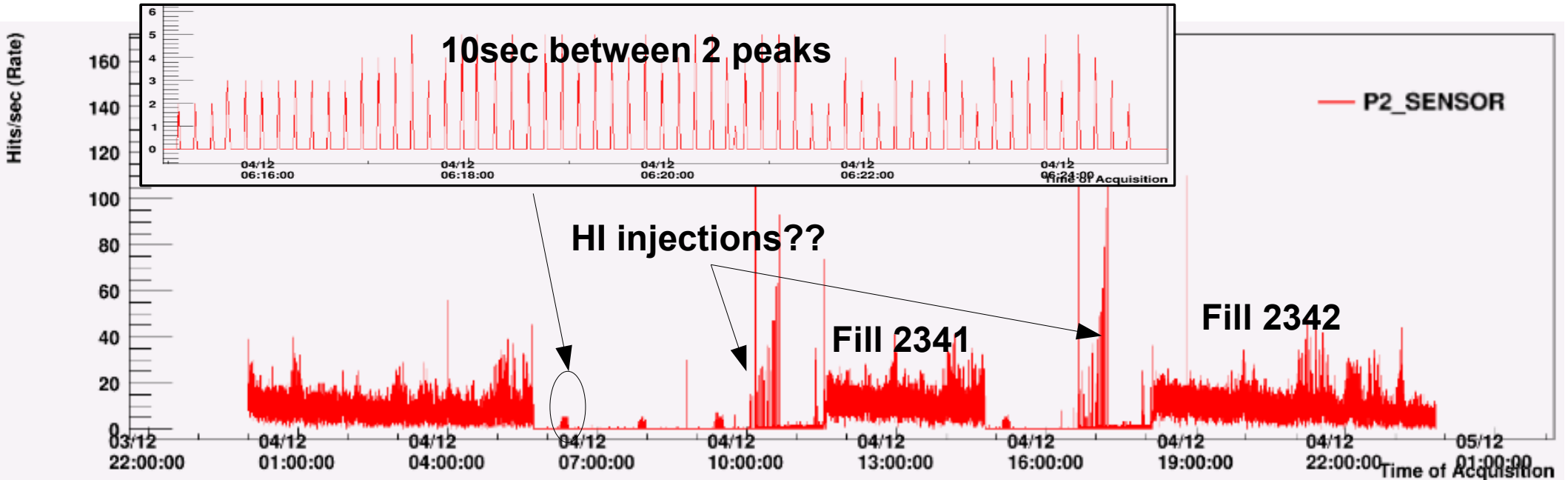
There are not collisions in LHCb, hence, the hits detected by sensor correspond to hits from beam halo and beam-gas interaction products.

Rates from scalers

- In between of 2 consecutive HI fills a pattern of peaks spaced by 10 sec and with a duration of ~10 min is observed in P8 and P2 sensors. Is it HI injection?
- Sensor in P8 clearly registers beam halo at a rate of 5 hits/sec. Since the sensor sits in a region with a high vacuum gauge (see plot in last slide), it might be also sensitive to beam-gas interaction

Notes:
Plot below shows averaged hits/sec over a min
For P8 sensor rates above 180 were discarded since they correspond to noise from module





Example of vacuum pressure in P8