



K-Modulation Beta* measurement

◆ Motivation

- ◆ Beta* measurements by K-Modulation have been widely used for optic studies
- ◆ A dedicated application has been developed
 - ◆ It is proposed that it becomes a standard OP tool
 - ◆ Then it needs to be fully tested before it is handed out to the end-user

◆ MD proposal

- ◆ Measure Beta* at 1-2 IPs using the dedicated application

◆ Requirements

- ◆ Time: 2 x 30 min
- ◆ Beam: any
- ◆ Beam process: any squeeze
- ◆ Can be combined with other MD – at the end of fill

◆ Expected results:

- ◆ Beta* measurements become part of routine operation



Chromaticity decay at flat-top

◆ Motivation

- ◆ Chromaticity decay is observed at flat-top
- ◆ Respective correction (QPV = 4.5 units) takes additional 340 seconds at the end of ramp beam process
- ◆ Proven method of correcting chromaticity at injection can be applied at flat-to
 - ◆ Model required

◆ MD proposal

- ◆ Measure uncorrected chromaticity at the beginning of the flat-top
- ◆ Correct chromaticity with FiDeL mechanism and measure

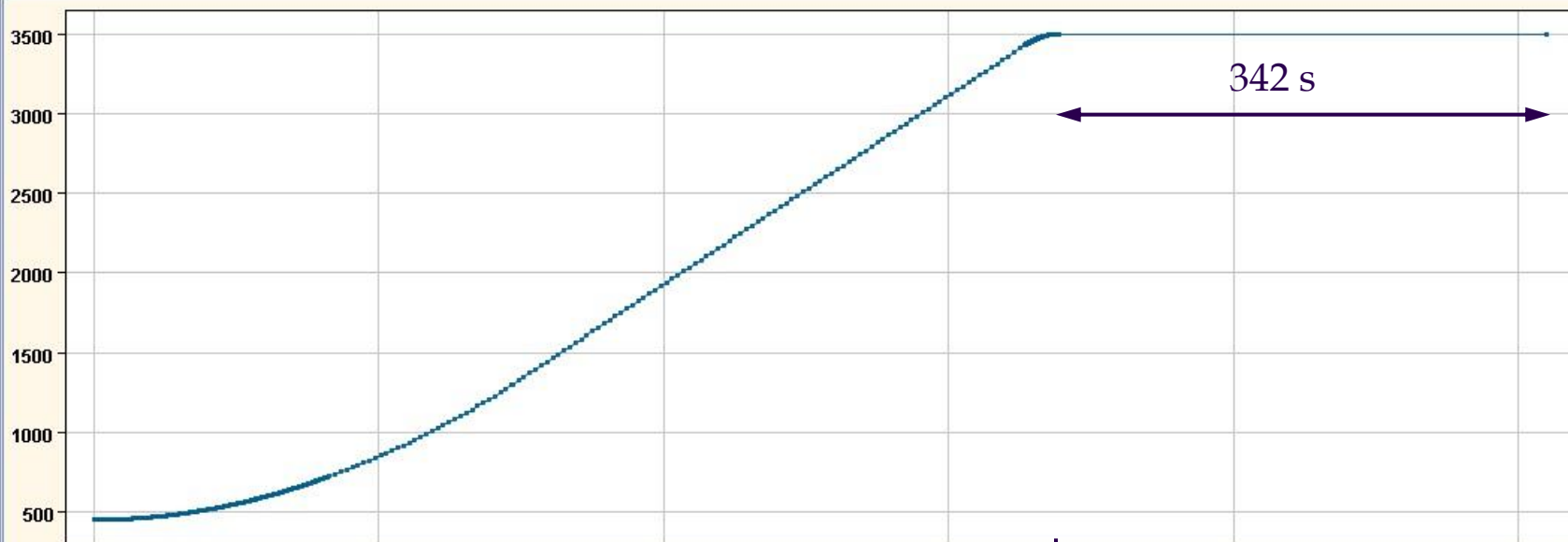
◆ Requirements

- ◆ Time: 3 x 20 min + 2 x up to 1 h (if required)
- ◆ Beam: any
- ◆ Beam process: dedicated ramp (without flat-top part)

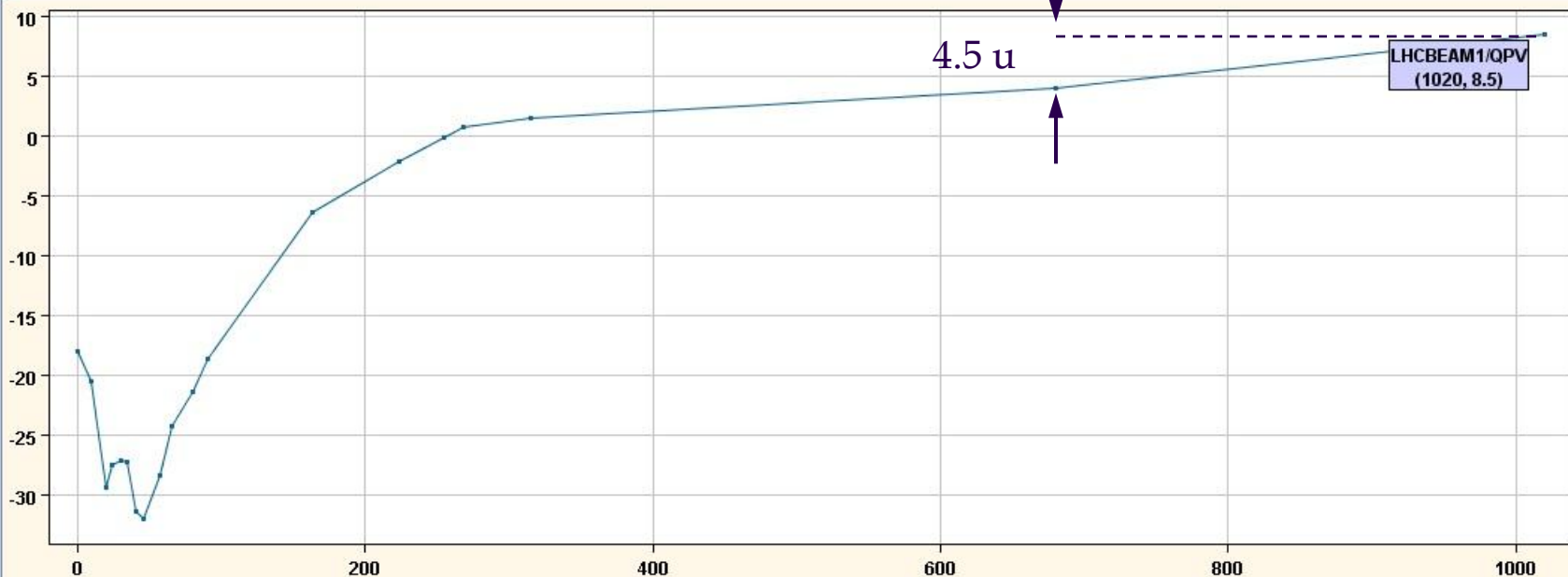
◆ Expected results

- ◆ Ramp beam process time reduction by 5.5 minutes

Displayed Function: LHCBEAM/MOMENTUM



Displayed Function: LHCBEAM1/QPV



Graph Table