



Experiment Report Form



	Experiment title: Resonant X-Ray Absorptio Holography	Experiment number: MI-635
Beamline:	Date of experiment: from: 24/07/2003 to: 28/08/2003	Date of report: 20/08/2003
Shifts:	Local contact(s): Dr. Jonathan Paul Wright	<i>Received at ESRF:</i>
Names and affiliations of applicants (* indicates experimentalists): Milos Kopecky, Edoardo Busetto, Andrea Lausi Sincrotrone Trieste, S. S. 14 - km 163.5 in Area Science Park, 34012 Basovizza - Trieste		

Report:

The previous experiment was carried out in July 2002 at 16 bunch operating mode of the storage ring. The experiment was not successful because of the beam instability of the order of 10-20% (dips in the primary beam intensity with frequency of about 4 Hz, Fig. 1) which was too high for good normalization of the data (we are looking for signal variations of the order of 0.1%). We lost first 6 shifts searching for the reason of this instability. Then it was discovered that it is an effect of global feedback of the machine and that it disappear when the ring current is higher than 60 mA. So we could use only about one half of the remaining time for our measurements. Moreover we lost completely the last shift due to problems with storage ring refilling. We suppose that the beam stability is usually much

better and therefore we decided to resubmit the proposal asking for the beamtime in the period when the storage ring is working in the mode of *uniform refilling* using higher currents.

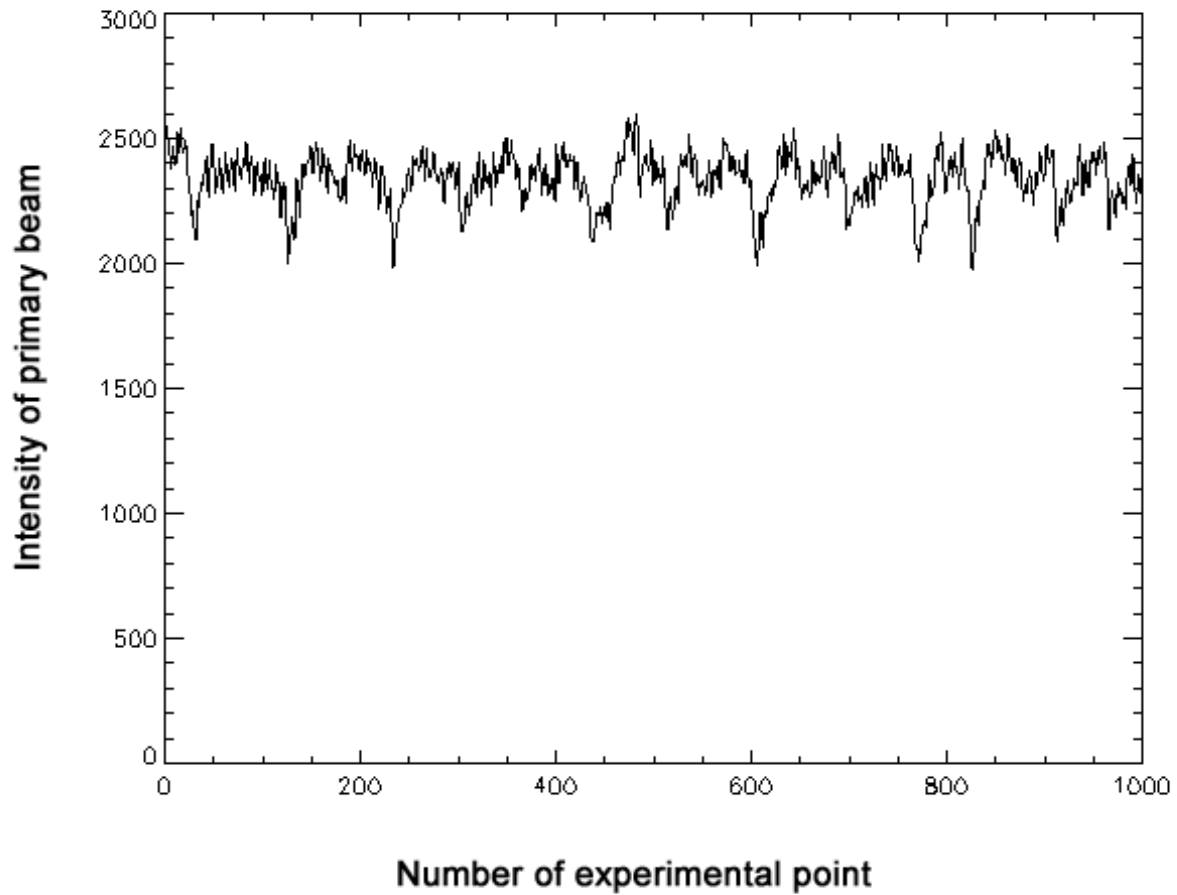


Fig. 1: Unstable incident beam. The data were collected each 3 ms, the horizontal axis corresponds to the period of 3 seconds.