

K. Hüber

ISR-ES/FB/11

29th July 1971

ISR RUNNING-IN

Run 93 - 28 July 1971

Ring 1 - 22 GeV/c - 20 bunches

* * * *

Effect of the wide angle spectrometer main magnet (experiment R 203) on the ISR beams

* * * *

Working point: FA 22

The spectrometer arm was at 90°, i.e. with the magnet in its farthest position from the ISR orbits. In these conditions its effect should be about the same on each ring. The closed orbits (horizontal and vertical) and the Q values of Ring I were measured with the magnet at its maximum current (1000 A) and at zero current.

The measurements gave:

	I = 1000 A	I = 0
<u>Hor. closed orbit:</u>		
average orbit	- 34.6 mm	- 34.7 mm
peak to peak	14.8 mm	14.4 mm
(as printed out)		
maximum difference		
between orbits:		0.8 mm

CERN LIBRARIES, GENEVA



CM-P00072604

	I = 1000 A	I = 0
<u>Vertical closed orbit:</u>		
peak to peak	5.4 mm	5.3 mm
maximum difference between orbits:		0.4 mm
Q_H	8.581	8.581
Q_V	8.554	8.555

It is concluded that the magnet has no effect on the ISR. The measurements must however be repeated with the spectrometer arm set at its smallest angle.

F. Bonaudi

Distribution: ISR Group Leaders
 Running-in Committee
 Engineers in charge
 E. Brouzet - NPS
 M. Höfert - NP
 K. Potter - "
 E. Lillethun - NP
 G. Jarlskog - "
 B. Couchman
 N. Siegel