

Bunch Compression Monitoring at SwissFEL

Nicole Hiller for the Advanced Instrumentation Group

BCM: Bunch Compression Monitor (uses coherent synchrotron radiation from last chicane magnet)

CDR: Coherent Diffraction Radiation Monitor (holed screen to generate radiation)

- 2-3 staged bunch compression
 - Coherent synchrotron radiation monitors right after chicanes
- Diffraction radiators after the chicanes
- Use signals for online monitoring and RF phase feedbacks



Longitudinal Diagnostics Workshop 19-20 Oct 2016, Daresbury, UK



• BCM: Non-invasive, but

each BC angle.

needs commissioning for

Monitors & Challenges



- Practical experience with detectors
 - New detectors
 - Joint measurements?
 - Implementation into beam feedbacks

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Impressions from the tunnel - installation nearly done



Longitudinal Diagnostics Workshop 19-20 Oct 2010, Daresbury, OK

Many people involved in installation of advanced instrumentation for SwissFEL



Apero for the installation of the diagnostics screens





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