

Welcome and Introduction to the Workshop

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X-Band Structures and Beam Dynamics Workshop $1^{st}-4^{th}$ December 2008 The Cockcroft Institute, Daresbury

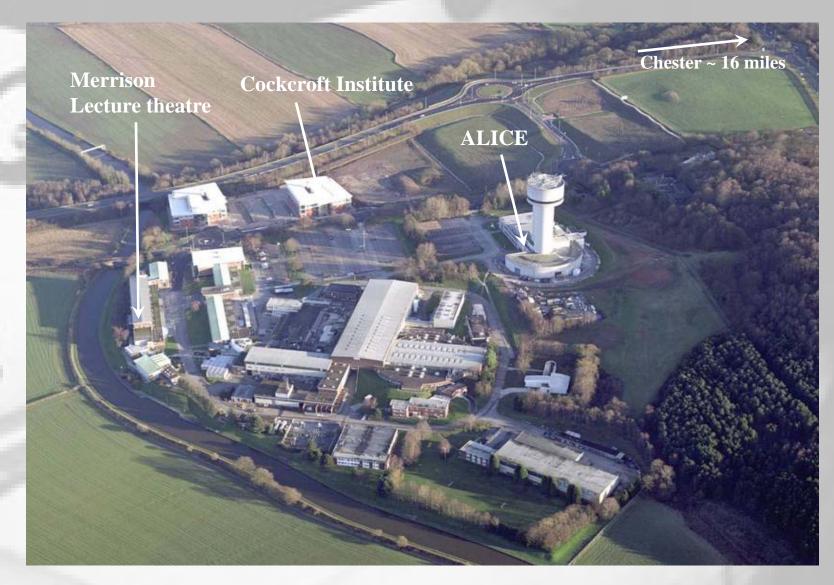
Logistics



- Today's Plenaries will take place in the Merrison Lecture hall.
- Morning coffee will be after first plenary directly outside Merrison
- Lunch will be in the Cockcroft Institute building (rm G08) at 12:00pm
- After 3 pm we will meet in the main lecture theatre of the Cockcroft Institute, the Walton Room and stay in CI.
- Thereafter the Plenaries will meet in the Cockcroft Institute.
- Safety exits are evident. Should there be a fire alarm —meet at the muster point outside
- Working groups will be in Walton (A-B), G08 rm C and S16
- Talks should be either uploaded via indico on the conference website or given to the Plenary Chair of WG Conveners

Daresbury Campus The Cockcroft Institute of Accelerator Science and Technology





Overview



- Welcome to The Cockcroft Institute!
- For any help with taxis etc please contact Sue Waller (<u>sue.waller@stfc.ac.uk</u>, or room S 01 on top floor).
- The meeting is scheduled to finish at lunch time on Thursday. A full Thursday morning plenary session is scheduled and a summary of WGs will be the final session after coffee.
- The tour of ALICE (aka ERLP) will be on Wednesday at 4 pm in groups of 10. Any delegates who have not signed up need to do so by the end of the morning
- Banquet attendees on Tuesday will take a bus from Cockcroft at 6:00 pm directly to Ruthin Castle in N. Wales. Laptops can be stored securely in the Walton rm.
- The deadline for JACoW papers is Thursday 4th Dec. These should either be uploaded on the indico server or emailed to editor Hywel Owen (hywel.owen@manchester.ac.uk).

Planning



- Build on success of two X-Band Workshops at CERN (June 2007) and KEK (May 2008)
- Idea first postulated at EPAC08. Thanks to Walter Wuensch for these initial inspiring exchanges.
- ICFA umbrella includes JACOW decision Open Access publishing. All papers should be submitted this week.
- Also, in addition there is the opportunity to submit to special workshop issue of PRST-AB: XB08.
- Thanks to Sponsors: CST, CPI, Q-par Angus ltd, ITech, CI
- Valuable advice especially: Walter Wuensch, Swapan Chattopadhyay, Richard Carter
- Please help your Convenors in the Working Group sessions!
- 82 registered (host + 59)
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Purpose and Goals (1)



- Pool collective resources in the X-band area.
- Collate the current state of the art in X-band in linear colliders, light sources and medical accelerators
- There have already been two X-Band workshops at CERN and KEK focussing on breakdown issues associated with high gradient applications (for CLIC in particular).
- This workshop will include these breakdown considerations but will also broaden the issues to embrace RF high power (RF source, coupler matching, wakefields) and beam dynamics concerns.
- For linear colliders, the heart of the collider is the main linac and associated drive beam. RF sources, beam dynamics and an appreciation of fabrication tolerances is a goal to be address by all WPs.
- Medical and industrial state of the art and future R&D will be part of final WG summaries
- Enjoy the workshop and foster new collaborations!
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WG Practical Matters



- All Working Groups will convene after the plenary sessions have completed at 3:40 pm each day.
- Those of you who have not signed up for a WG should do so during the coffee or lunch break.
- The WG room allocations will be posted in the back of the Walton room as they develop.
- Details of WGs, titles and authors of talks will be similarly posted
- This is a workshop! And so feel free to submit talks as they develop to the WG conveners. It is expected that some talks will develop organically as a result of the stimulus of earlier talks.
- Proposed joint WGs will be posted

Goals



- Review state of art X-Band Developments
- Understand proposed project demands —and integrate physics with industrial/practical aspects
- Examine R&D challenges Colliders (CLIC), Medical, Industrial and associated features
- Summarise future development priorities
- Recommend necessary steps physics and technology
- Strengthen/foster international collaborations