International Conference on FFAGs



Monday, 21 September 2009 - Friday, 25 September 2009

One West, atrium, Wilson Hall

Scientific Programme

This international conference, which has been held on a yearly schedule (since 1999), proposes to bring together the top international accelerator designers of:

FFAG accelerator designs for high intensity muon beams for Muon Factory and Neutrino Factory and status of EMMA electron prototype.

Medical accelerators, (in addition to FFAG designers, synchrotron and cyclotron experts) and new FFAG gantry concepts.

FFAGs for Accelerator Driven Subcritical Systems, ADSR, (to be compared with compared with linac and rapid-cycling synchrotrons, for example).

Electron FFAGs whose applications include cargo scanning and food sterilization.

The present designs of FFAG accelerators include multi-GeV accelerators to support the 20-50 GeV Neutrino Factory designs, 250 MeV medical proton and 400-Mev/nucleon carbon accelerators and electron versions for industrial applications. The workshop will cover the progress of the first nonscaling FFAG (EMMA) at Daresbury Laboratory and topics related to challenges to the design and simulation of FFAG optics. Advances and the state of the large number of FFAG medical accelerator projects will be a significant part of this workshop, such as progress on PAMELA and, importantly, progress on large-aperture fixed and frequency-swept RF systems. A talk will also be delivered by Y. Mori on the first successful demonstration of ADSR at the Kyoto University Research Reactor Institute. The workshop is timed to have an impact on both PTCOG, which is in Heidelberg the following week and to produce a summary of FFAG applications for future strategic application workshops.