

John Adams Institute for Accelerator Science Lecture Series

Thursday 4th December 2014 at 4:15 pm Fisher Room, Denys Wilkinson Building

The Origins of Particle Accelerators and their Early Development in the UK

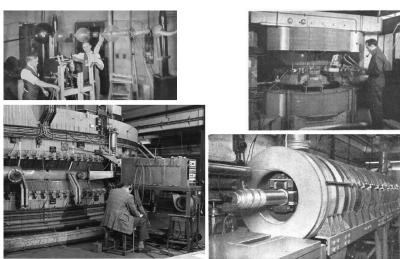
The lecture will be delivered by

R.P. Walker, Diamond Light Source

Abstract:

We start by examining the origins of particle accelerators in the 1920's and the lead-up to the first "atom smashing" experiments in 1932. We then trace the development of three main types of accelerator, the cyclotron, the synchrotron and the linear accelerator, with particular emphasis on work in the UK.

Along the way we will throw some light on a number of vexed issues such as, why didn't Rutherford want a cyclotron and why eventually did he change his mind? what credit should be given to Oliphant concerning the invention of the synchrotron? why is the early UK work on linear accelerators often "forgotten"? and not least, how did the motor car come to the rescue, on two occasions?!



For further details contact Glenn Christian at g.christian1@physics.ox.ac.uk