



## **Joint seminar of the John Adams Institute for Accelerator Science, Diamond Light Source and ASTeC**

Monday 23<sup>rd</sup> May 2016 at 4:15 pm

Dennis Sciama Lecture Theatre, Denys Wilkinson Building

### ***Superconducting wigglers and undulators***

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*Abstract:*

Superconducting multipole wigglers and undulators installed on synchrotron radiation sources are the powerful tools for researches in various areas of science and technics. Relativistic electrons, passing through such set of magnetic elements, create radiation with properties of synchrotron radiations depending on maximum field, its period and poles number. The main purpose of these devices installed on Synchrotron Radiation (SR) sources is to increase brightness and rigidity of the radiation. Nowadays tens of superconducting wigglers and several superconducting undulators are successfully working in the various synchrotron radiation centers. The description of magnetic properties of the wigglers, parameters of both the cryogenic and vacuum systems and their technical decisions will be presented in the report.

