Microsymposium

MS103.001

Conventional and unconventional studies of magnetic structures with x-rays

<u>Stephen Patrick Collins</u>¹

1 Diamond Light Source, Didcot, United Kingdom
E-mail: steve.collins@diamond.ac.uk

This talk will provide a brief introduction to modern synchrotron facilities and techniques for studies of magnetic structures, highlighting some examples, limitations and future directions. We will focus on the use of hard x-ray probes of single crystal samples. The talk will then move into less well-charted territory, highlighting some recent investigations where higher-order multipole resonances and induced charge scattering play important roles, along with new approaches to observing magnetoelectric sample properties.

Keywords: magnetism, x-rays, magnetoelectric