## **The XPDF Project**

<u>Andrew Goodwin</u><sup>1</sup>, Simon Billinge<sup>2</sup>, Daniel Bowron<sup>3</sup>, Andy Dent<sup>4</sup>, Martin Dove<sup>5</sup>, Alastair Florence<sup>6</sup>, Joseph Hriljac<sup>7</sup>, David Keen<sup>3</sup>, Gopinathan Sankar<sup>8</sup>

<sup>1</sup>University of Oxford <sup>2</sup>Columbia University <sup>3</sup>Rutherford Appleton Laboratory <sup>4</sup>Diamond Light Source <sup>5</sup>Queen Mary University of London <sup>6</sup>University of Strathclyde <sup>7</sup>University of Birmingham <sup>8</sup>University College London

In November 2010, we submitted a proposal for XPDF as part of the Phase III beamline construction call.

Our vision at the time was "to build an instrument that measures X-ray pair distribution function (PDF) data of the highest quality possible at DLS, servicing the very large number of UK research groups whose work relies on understanding local structure in materials".

This talk will provide an overview of the XPDF project, and how that original vision has developed into the I15-1 beamline. Particular emphasis will be placed on the science enabled by XPDF, and the potential role this beamline will play in the future of UK structural science.

Email corresponding author: andrew.goodwin@chem.ox.ac.uk