**APS Scientific Computation Seminar Series**

**Speaker:** James Hall  
Senior Software Engineer, LIMS Team Lead  
Diamond Light Source Ltd.

**Title:** ISPyB: The Laboratory Information Management System (LIMS) for Structural Biology at the Diamond Light Source

**Date:** September 18, 2023

**Time:** 1:00 p.m. (Central Time)

**Location:** Join ZoomGov Meeting  
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**Hosts:** Mathew Cherukara and Nicholas Schwarz

**Abstract:** ISPyB is a laboratory information management system (LIMS) developed as a collaboration between the European Synchrotron Radiation Facility (ESRF), Diamond Light Source (DLS), and other synchrotron facilities. ISPyB has evolved from a database confined to simple sample tracking, experiment recording, and reporting to support sophisticated web-based applications for experiment planning, management, and presentation of downstream processing results. Experimental techniques range from cryogenic electron microscopy (cryo-EM) and tomography (cryo-ET) to high-throughput, automated data collection on macromolecular crystallography (MX) beamlines, including directly from crystallization experiments in situ. Work is in progress to support MX Bridge, a highly automated beamline to be operated at the Advanced Photon Source (APS) to provide continuity of service to Diamond’s MX users during the Diamond-II upgrade ‘dark period.’