



Program

Sunday 6 July - Introduction

2:00-3:30	Arrival and registration, Coffee
3:30-3:45	Welcome – House Keeping
3:45-4:20	Overview of Crystallography, A road map
4:30-6:00	Introduction to diffraction I
Evening	Laser Show - Diffraction

Monday 7 July - Diffraction

9:00-10:30	Introduction to diffraction II
11:00-12:30	Introduction to diffraction III
2:00-3:30	Introduction to Cells and Symmetry I
4:00-5:50	Introduction to Cells and Symmetry II
5:00-6:00	Introduction to Indexing and Data Reduction I
Evening	Student talks I

Tuesday 8 July - Data

9:00 - 9:50	Introduction to Indexing and Data Reduction II and Unit Cells and Space Groups
9:50 - 10:45	Introduction to Indexing and Data Reduction III and Data Collection
11:00 – 12:00	Parallel Sessions: MOSFLM/SCALA (Protein) Space Groups (for Chem. and Phys.)
12:00 – 1:00	HKL2000 and Data Statistics
2:00-5:50	Hands on Data Processing session
Evening I	Overview of Synchrotron Radiation
Evening II	Student Talks II

Wednesday 9 July - Phasing

8:00 – 8:50	Fouriers, Structure Factors and the Phase Problem
8:50 – 9:40	Patterson Maps
9:40 – 10:30	Twinning
11:00-11:50	Parallel Sessions: Protein Phasing Methods and Direct Methods (Chem & Phys)
12:00-12:50	Parallel Sessions: Protein - MIR Refinement Overview (Chem & Phys)
2:00-5:50	Workshops: Protein Phasing and Chem & Phys Refinement- Lectures + Exercises
Evening	Refinement

Thursday 10 July – Phasing (Protein) and Refinement (Chem&Phys)

9:00-9:50	Anomalous Dispersion
10:00-10:40	SAD/MAD Phasing (Protein) Refinement (Chem & Phys)
11:00-12:50	SHELX (Protein) Further Refinement (Chem & Phys)
2:00-5:50	Phasing and Refinement Workshops
Evening	

Friday 11 July - Molecular Replacement (Protein) Structure Reporting and Validation (Chem & Phys)

9:00-9:50	Molecular Replacement Theory (Protein) Reporting Structures - Derivation of Results, Errors and Modelling (Chem& Phys)
9:50-10:40	Finding a Search Model (Protein) Reporting Structures Cont. (Chem & Phys)
11:00-11:50	Molecular Replacement Programs (Protein) Structure Validation (Chem & Phys)
11:50-12:50	Phase Improvement and Extension (Protein) Comparison and Significance (C&P)
2:00-5:50	Phasing Workshop III Results and Presentation Workshop (Chem & Phys)

Saturday 12 July Rounding it out...

9:00-9:50	Refinement (Protein) Databases (Chemical and Physical)
9:50-10:40	Model Building (Protein) Introduction to Neutron Diffraction (Chem and Phys)
11:00-11:50	More Model Building (Protein) Introduction to Powder Diffraction (Chem & Phys)
11:50 – 12:50	Model Validation (Protein) Further Powder Diffraction (Chem & Phys)
2:00 -3:30pm?	Model Building and Validation Workshop (Protein) Neutron & Powder Workshop

OS Lecturers

Peter Main (York)
Garry Taylor (St. Andrew's)
David Watkin (Oxford)
Murray Stewart (Cambridge)



Local Lecturers and Tutors

Stuart Batten (Monash)
Charlie Bond (UWA)
Tom Caradoc-Davies (Australian Synchrotron)
Paul Carr (ANU)
Nathan Cowieson (UQ)
Darren Goosens (ANU)
Mitchell Guss (Sydney)
Paul Jensen (Sydney)
Brendan Kennedy (Sydney)
Janet Newman (CSIRO)
Marcia Scudder (UNSW)
Brian Skelton (UWA)
Andrew Studer (ANSTO)
James Whisstock (Monash)
Matthew Wilce (Monash)

Sponsors

