# **BCA/CCP4 Protein Crystallography Summer School 2018 Draft Programme**

### Monday 27<sup>th</sup> August 2018

15:00	Arrival and registration
16:00	Welcome
16:10	Talk: Crystallography
16:30	Student Stories
18:30	Dinner
19:30	Student Stories
21:30	Drinks

#### Tuesday 28<sup>th</sup> August 2018

7:30	Breakfast
9:00	Lecture: Crystallization
9:45	Lecture: Diffraction
10:30	Coffee
11:00	Lecture: Crystal Preparation for Cryocrystallography
11:45	Lecture: Fourier Transform
12:30	Lunch
13:30	Lecture: Symmetry and Space Groups
14:15	Lecture: Space Group Determination
15:30	Tea
16:00	Social Event in Oxford

# Wednesday 29<sup>th</sup> August 2018

7:30	Breakfast
9:00	Lecture: Data Collection
9:45	Lecture: Data Scaling and Merging
10:30	Coffee
11:00	Practical: Data Processing
12:30	Lunch
13:30	Lecture: Pattersons
14:00	Lecture: Models for Molecular Replacement
14:30	Lecture: Molecular Replacement
15:30	Tea
16:00	Practical: Molecular Replacement
19:00	Dinner
20:00	Guest Lecture

#### Thursday 30<sup>th</sup> August 2018

7:30	Breakfast
9:00	Lecture: Maximum likelihood with Dice

9:45	Lecture: Preparation of Derivatives
10:30	Coffee
11:00	Lecture: Finding Heavy Atom Sites
11:30	Lecture: Experimental Phasing MAD/SAD
12.30	Lunch
13:30	Lecture: Phase Improvement and Model Building
15:00	Tea
15:30-	Practical: Your own data or
18:00	Complete previous practical or
	MAD/MIR Phasing with phenix
19:00	Dinner
20:00	Movie: The Double Helix

## Friday 31st August 2018

7:30	Breakfast
9:00	Lecture: Refinement
10:30	Coffee
11:00	Lecture: Validation
12:30	Lunch
13:30	Lecture: Radiation Damage
14:15	Lecture: Twinning
15:30	Tea
16:00	Practical: Model Building, Refinement and Validation
19:30	Conference Dinner with Guest Speaker

# Saturday 1<sup>st</sup> September 2018

7:30	Breakfast
9:30	Lecture: Graphics and Representations
10:15	Quiz Questions
10:30	Coffee
11:00	Lecture: NMR
11:45	Lecture: Experiment Management
12:30	Lunch
13:30	Lecture: Electron Microscopy
14:30	Quiz Answers
15:00	Close