

Wednesday 14th March		
13:00	13:10	Welcome by Local Organisers ( <b>Robin Owen &amp; Armin Wagner</b> )
13:10	13:20	Welcome by the Director of Life Sciences at Diamond Light Source ( <b>Dave Stuart</b> )
13:20	13:40	Setting the Scene for RD7 ( <b>Colin Nave</b> )
13:40	14:40	<b>Session 1 - Basic Understanding of Radiation Damage Mechanisms</b>
13:40	14:10	<b>Frank von Delft</b> <i>Leaving Group Effect in Specific and Global Damage Suggested by UV and X-ray Damage Signatures</i>
14:10	14:40	<b>Armin Wagner</b> <i>X-ray induced hydrogen abstraction from the nucleotide Thymidine</i>
14:40	15:10	Coffee Break: Diamond atrium
15:10	15:40	<b>Ian Carmichael</b> Radiation chemistry in crystallization screens
15:40	16:10	<b>Chitra Rajendran</b> <i>Systematic temperature dependent and radiation damage studies of Lipidic Cubic Phase</i>
16:10	16:40	<b>James Holton</b> <i>A simple case of radiation damage</i>
16:40	17:25	Coffee Break: Diamond Atrium
17:25	17:55	<b>Kristina Djinović-Carugo</b> X-ray induced activation of carbonic anhydrase
17:55	19:00	<b>Session 2 - Damage at New Sources - XFEL</b>
17:55	18:35	<b>Henry Chapman</b> <i>X-ray Imaging Beyond the Limits</i>
18:35	19:00	<b>Lukas Lomb</b> <i>Structure determination and radiation damage in serial femtosecond crystallography</i>
19:00		Transport to Abingdon - Delegates to organise own dinner

Thursday 15th March	
09:30 - 11:30	<b>Session 3 - Practical Aspects of Managing Radiation Damage</b>
09:30 - 10:00	<b>Zbyszek Otwinowski</b> <i>Seeing is believing—outcomes of correcting for radiation damage in diffraction data</i>
10:00 - 10:30	<b>Sasha Popov</b> <i>Routine measurements of radiation damage in macromolecular crystals at cryo and room temperature</i>
10:30 - 11:00	<b>Tom Burnley</b> <i>Ensemble refinement of protein crystal structures in PHENIX</i>
11:00 - 11:30	Coffee break
11:30 - 14:30	<b>Session 4 - Reducing and Mitigating Radiation Damage</b>
11:30 - 12:00	<b>Enrique Rudno-Pinera</b> <i>Crystallographic Evidence for Proton-Relay Mechanism in the O<sub>2</sub> Reduction to H<sub>2</sub>O by a multicopper oxidase from <i>Thermus thermophilus</i> HB27</i>
12:00 - 12:30	<b>Elsbeth Garman</b> <i>To scavenge or not to scavenge, that is STILL the question</i>
12:30 - 13:00	<b>Kunio Hirata</b> <i>Strategy for efficient data collection from tiny protein crystals using helical data collection method</i>
13:00 - 14:00	Lunch and Poster Session - Diamond Atrium
14:00 - 14:30	<b>Robin Owen</b> <i>Can we outrun radiation damage at room temperature?</i>
14:30 - 15:00	<b>Matt Warkentin</b> <i>Time-dependent global radiation damage: Can it be outrun?</i>
15:00 - 0.958	<b>Session 5 - Radiation Damage in Complementary Fields</b>
15:00 - 15:30	<b>Dominique Bourgeois</b> <i>X-activated structural dynamics in fluorescent proteins</i>
15:30 - 16:15	<b>Coffee Break</b>
16:15 - 16:45	<b>Richard Henderson</b> <i>Radiation damage in electron microscopy and diffraction</i>
16:45 - 17:15	<b>Raimond Ravelli</b> <i>Radiation damage studies in cryo-electron microscopy</i>
17:15 - 17:45	<b>Liz Duke</b> <i>Radiation Damage in Soft X-ray Microscopy</i>
17:45 - 18:15	<b>Eddie Snell</b> <i>Radiation damage in Small Angle X-ray Scattering (SAXS): Influence, identification and mitigation</i>
18:15 - 18:30	Poster Session
18:15	Bus to Cosener's House, Abingdon
19:00	Drinks and Conference Dinner at Cosener's House, Abingdon

## Friday 16th March

<b>09:30 - 12:30</b>	<b>Session 6 - Temperature-Dependent (including RT) Radiation Damage</b>
<b>09:30 - 10:00</b>	<b>Rob Thorne</b> <i>Temperature dependence of radiation damage: Implications for damage mechanisms and damage mitigation</i>
<b>10:00 - 10:30</b>	<b>Tatiana Petrova</b> <i>X-ray-induced cooperative atomic movement and site-specific damage to protein crystals at 15 and 100 K and their relation with overall crystal damage</i>
<b>10:30 - 11:00</b>	<b>Paul Carr</b> <i>Protein dynamics, radiation damage and catalytic turnover of diethylumbellifereryl phosphate in the active site of the <math>\alpha</math>E7 carboxylesterase from <i>Lucilia cuprina</i> derived from X-ray data.</i>
<b>11:00 - 11:30</b>	Coffee break
<b>11:30 - 12:00</b>	<b>Marius Schmidt</b> <i>Radiation Damage in Room Temperature Time-Resolved Macromolecular Crystallography</i>
<b>12:00 - 12:30</b>	<b>Wrap Up (Martin Weik &amp; Elspeth Garman)</b>