

	Sunday 21 August 2022
5:00 PM - 7:00 PM	Welcome Reception and Registration

	Monday 22 August 2022					
7:30 AM – 8:30 AM			Registration			
8:30 AM – 9:00 AM	Opening Remarks Room: Exchange Auditorium					
9:00 AM – 10:00 AM	Plenary: Professor André Geim Room: Exchange Auditorium					
10:00 AM - 11:00 AM	Semi-plenary: Professor Michael Tobar Room: Exchange Auditorium					
11:00 AM – 11:30 AM			Morning Break and Posters Room: Exchange Hall			
	MC23: Superconducting Circuits for Quantum Technologies I	MC21: Bound States in Hybrid Superconductor Nanostructures I	MC6: Emergent Phenomena in Driven Soft, Active and Biological Matter I	MC8: Complex Phases in Soft Matter I	MC16: Spin Control in Twisted Van Der Waals Heterostructures	
	Room: Exchange Auditorium	Room: Charter 1	Room: Charter 2	Room: Charter 3	Room: Charter 4	
11:30 AM - 12:30 PM	MC12: Physics in 2D Nanoarchitectonics I	MC28: Condensed-matter Quantum Technology on the Hunt for Dark Matter I	MC47: X-ray FreeElectron Lasers for Condensed Matter & Materials Physics (XFELs for CMMP) I	MC18: Developments at the Frontiers of High-resolution Scanning Probe Microscopy I	MC13: Topological and Geometrical Effects in Complex Nanostructures I	
	Room: Exchange 1	Room: Exchange 3	Room: Exchange 4	Room: Exchange 5	Room: Exchange 6	
	MC40: Strongly Disordered	MC41: Real Space Simulations	MC44: New Perspectives in	3	<u> </u>	
	Insulators I	of Topological Matter and Disordered Materials I	Magnonics, from 2D to 3D Systems I			
	Room: Exchange 7	Room: Exchange 9	Room: Exchange 11			

12:30 PM – 2:00 PM	Lunch, Posters and Exhibition Room: Exchange Hall					
	MC23: Superconducting Circuits for Quantum Technologies II	MC21: Bound States in Hybrid Superconductor Nanostructures II	MC6: Emergent Phenomena in Driven Soft, Active and Biological Matter II	MC8: Complex Phases in Soft Matter II	MC19: Advances in the Casimir Force and Heat Transfer Phenomena II	
	Room: Exchange Auditorium	Room: Charter 1	Room: Charter 2	Room: Charter 3	Room: Charter 4	
2:00 PM – 3:30 PM (unless stated)	MC12: Physics in 2D Nanoarchitectonics II	MC28: Condensed-matter Quantum Technology on the Hunt for Dark Matter II	MC47: X-ray Free Electron Lasers for Condensed Matter & Materials Physics (XFELs for CMMP) II	MC18: Developments at the Frontiers of High-resolution Scanning Probe Microscopy II	MC13: Topological and Geometrical Effects in Complex Nanostructures II	
Julius and the second s	Room: Exchange 1	Room: Exchange 3	Room: Exchange 4 Time: 2:00 PM – 4:00 PM	Room: Exchange 5	Room: Exchange 6 Time: 2:00 PM – 4:00 PM	
	MC40: Strongly Disordered Insulators II	MC41: Real Space Simulations of Topological Matter and Disordered Materials II	MC44: New Perspectives in Magnonics, from 2D to 3D Systems II			
	Room: Exchange 7	Room: Exchange 9	Room: Exchange 11			
3:30 PM - 4:30 PM			Afternoon Break and Posters Room: Exchange Hall			
	MC23: Superconducting	MC21: Bound States in Hybrid	MC6: Emergent Phenomena in	MC46: Matter Under High	MC19: Advances in the Casimir	
	Circuits for Quantum Technologies III	Superconductor Nanostructures	Driven Soft, Active and Biological Matter III	Pressure III	Force and Heat Transfer Phenomena III	
4:30 PM -	Room: Exchange Auditorium	Room: Charter 1	Room: Charter 2	Room: Charter 3	Room: Charter 4	
6:00 PM	MC12: Physics in 2D Nanoarchitectonics III	MC18: Developments at the Frontiers of High-resolution Scanning Probe Microscopy III	MC40: Strongly Disordered Insulators III	MC41: Real Space Simulations of Topological Matter and Disordered Materials III	MC44: New Perspectives in Magnonics, from 2D to 3D Systems III	
	Room: Exchange 1	Room: Exchange 5	Room: Exchange 7	Room: Exchange 9	Room: Exchange 11	

		Tueso	day 23 August 2022			
9:00 AM – 10:00 AM	Plenary: Professor Matthias Troyer Room: Exchange Auditorium					
10:00 AM – 11:00 AM	Semi-plenary: Professor Päivi Törmä Room: Exchange Auditorium	Semi-plenary: Professor Luis Hueso Room: Charter 1				
11:00 AM – 11:30 AM			Morning Break and Posters Room: Exchange Hall			
	MC23: Superconducting Circuits for Quantum Technologies IV	MC21: Bound States in Hybrid Superconductor Nanostructures IV	MC6: Emergent Phenomena in Driven Soft, Active and Biological Matter IV	MC8: Complex Phases in Soft Matter IV	MC35: Collective Effects and Non-Equilibrium Phenomena in Quantum Gases and Superconductors IV	
	Room: Exchange Auditorium	Room: Charter 1	Room: Charter 2	Room: Charter 3	Room: Charter 4	
11:30 AM – 12:30 PM (unless stated)	MC12: Physics in 2D Nanoarchitectonics IV	MC45: Interfaces Between Magnonics and Phononics IV	MC36: Integrating Quantum Computers in Condensed Matter Physics Simulations IV Room: Exchange 3	MC48: Multi-modal Characterisation of Thin Film Optoelectronics for Energy Applications IV	MC42: Broken Ergodicity and Localisation in Quantum Many- body Systems IV	
	Room: Exchange 1	Room: Exchange 2	Time: 11:30 AM - 12:45 PM	Room: Exchange 5	Room: Exchange 6	
	MC40: Strongly Disordered Insulators IV	MC20: Recent Advances in Quantum Thermodynamics with a Focus on Many-body Interactions IV	MC46: Structure, Dynamics and States in Matter Under High Pressure IV	MC52: Heterostructures, Combining Organic Molecules and 2D Materials IV		
	Room: Exchange 7	Room: Exchange 9	Room: Exchange 10	Room: Exchange 11		
12:30 PM –	Lunch, Posters, Exhibition and Special Session Special Session: environmental policy and carbon footprint, presented by Henrik Nordborg, Bertrand Dupé and Maxime Deforêt					
2:00 PM	Lunch and Posters - Room: Exchange Hall Special Session – Room: Exchange Auditorium					

	MC23: Superconducting Circuits for Quantum Technologies V	MC21: Bound States in Hybrid Superconductor Nanostructures V	MC6: Emergent Phenomena in Driven Soft, Active and Biological Matter V	MC8: Complex Phases in Soft Matter V	MC19: Advances in the Casimir Force and Heat Transfer Phenomena V
	Room: Exchange Auditorium	Room: Charter 1	Room: Charter 2	Room: Charter 3	Room: Charter 4
	MC16: Spin Control in Twisted	MC45: Interfaces between	MC36: Integrating Quantum	MC50: Fermi Surface	MC48: Multi-modal
	Van Der Waals	Magnonics and Phononics V	Computers in Condensed	Topological Transitions – Effects	Characterisation of Thin Film
2:00 PM – 3:30 PM	Heterostructures V		Matter Physics Simulations V	of Interactions V	Optoelectronics for Energy Applications V
(unless stated)	Room: Exchange 1	Room: Exchange 2	Room: Exchange 3 Time: 2:00 PM - 3:45 PM	Room: Exchange 4	Room: Exchange 5
	MC42: Broken Ergodicity and	MC40: Strongly Disordered	MC20: Recent Advances in	MC17: Nanomechanical and	MC52: Heterostructures,
	Localisation in Quantum Many-	Insulators V	Quantum Thermodynamics	Electromechanical Systems V	Combining Organic Molecules
	body Systems V		with a Focus on Many-body		and 2D Materials V
			Interactions V		
	Room: Exchange 6	Room: Exchange 7	Room: Exchange 9	Room: Exchange 10	Room: Exchange 11
3:30 PM – 4:30 PM			Afternoon Break and Posters Room: Exchange Hall		
	MC23: Superconducting Circuits	MC21: Bound States in Hybrid	MC6: Emergent Phenomena in	MC46: Structure, Dynamics and	MC19: Advances in the Casimir
	for Quantum Technologies VI	Superconductor Nanostructures	Driven Soft, Active and	States in Matter under High	Force and Heat Transfer
		VI	Biological Matter VI	Pressure VI	Phenomena VI
	Room: Exchange Auditorium (From 4:30 PM – 5:30 PM)	Room: Charter 1	Room: Charter 2 Time: 4:30 PM – 5:30 PM	Room: Charter 3	Room: Charter 4
	MC16: Spin Control in Twisted	MC36: Integrating Quantum	MC48: Multi-modal	MC42: Broken Ergodicity and	MC40: Strongly Disordered
	Van Der Waals	Computers in Condensed	Characterisation of Thin Film	Localisation in Quantum Many-	Insulators VI
4:30 PM – 6:00 PM (unless	Heterostructures VI	Matter Physics Simulations VI	Optoelectronics for Energy Applications VI	body Systems VI	
stated)	Room: Exchange 1	Room: Exchange 3	Room: Exchange 5 Time: 4:15 PM – 5:45 PM	Room: Exchange 6 Time: 4:15 PM – 5:30 PM	Room: Exchange 7
	MC20: Recent Advances in	MC17: Nanomechanical and	MC52: Heterostructures,		
	Quantum Thermodynamics	Electromechanical Systems VI	Combining Organic Molecules		
	with a Focus on Many-body Interactions VI		and 2D Materials VI		
	Room: Exchange 9 Time: 4:00 PM – 6:00 PM	Room: Exchange 10	Room: Exchange 11		

5:30 PM - 6:30 PM	Semi-plenary: Professor Henrik Nordborg	Semi-plenary: Professor Kartik Srinivasan		
0.50 1 111	Nordsorg	Simvasan		
	Room: Exchange Auditorium	Room: Charter 2		

	Wednesday 24 August 2022					
9:00 AM – 10:00 AM	Plenary: Professor Daan Frenkel Room: Exchange Auditorium					
10:00 AM - 11:00 AM	Semi-plenary: Professor Gábor Csányi Room: Exchange Auditorium	Semi-plenary: Professor Jessica Wade Room: Charter 1				
11:00 AM – 11:30 AM			Morning Break and Posters Room: Exchange Hall			
11:30 AM – 12:30 PM	Europhysics Prize Room: Exchange Auditorium					
12:30 PM – 2:00 PM	Lunch, Posters, Exhibition and Special Session Special Session: Inclusiveness and Diversity presented by Prof Helen Gleeson - IOP representative on Diversity and Inclusion, Dr Judith Hillier - IOP Marie Curie Sklodowska Medal and Prize winner 2021 and Dr Jessica Wade - Imperial College Lunch and Posters - Room: Exchange Hall Special Session – Room: Exchange Auditorium					
	MC38: Controlled irradiation Disorder in Model Systems: Organisation, Dynamics, and Transformations VII	MC24: Quantum Electronics at Ultra-low Temperatures VII	MC8: Complex Phases in Soft Matter VII	MC17: Nanomechanical and Electromechanical Systems VII	MC14: Beyond Charge Transport in Nanostructures and 2D Materials via Geometric Design VII	
2:00 PM – 3:30 PM	Room: Exchange Auditorium MC35: Collective Effects and Non-Equilibrium Phenomena in Quantum Gases and Superconductors VII	Room: Charter 1 MC10: Nanodevice Iontronics VII	Room: Charter 2 MC42: Broken Ergodicity and Localisation in Quantum Manybody Systems VII	Room: Charter 3 MC40: Strongly Disordered Insulators VII	Room: Charter 4 MC7: Exploring Liquid Properties in Confined Geometry (Up to Mesoscopic Scales) VII	
	Room: Exchange 1 MC50: Fermi Surface Topological Transitions - Effects of Interactions VII Room: Exchange 11	Room: Exchange 3	Room: Exchange 6	Room: Exchange 7	Room: Exchange 9	

3:30 PM – 4:30 PM	Afternoon Break and Posters Room: Exchange Hall					
	MC38: Controlled irradiation Disorder in Model Systems: Organisation, Dynamics, and Transformations VIII	MC21: Bound states in hybrid superconductor nanostructures VIII	MC2: Self-Organisation in Living Systems VIII	MC17: Nanomechanical and Electromechanical Systems VIII	MC14: Beyond Charge Transport in Nanostructures and 2D Materials via Geometric Design VIII	
	Room: Exchange Auditorium	Room: Charter 1 Time: 4:15 PM - 6:00 PM	Room: Charter 2	Room: Charter 3	Room: Charter 4	
4:30 PM - 6:00 PM (unless stated)	MC35: Collective Effects and Non-Equilibrium Phenomena in Quantum Gases and Superconductors VIII	MC10: Nanodevice Iontronics VIII	MC42: Broken Ergodicity and Localisation in Quantum Many- body Systems VIII	MC40: Strongly Disordered Insulators VIII	MC7: Exploring liquid properties in confined geometry (up to mesoscopic scales) VIII	
	Room: Exchange 1	Room: Exchange 3	Room: Exchange 6	Room: Exchange 7	Room: Exchange 9	
	MC50: Fermi Surface Topological Transitions - Effects of Interactions VIII Room: Exchange 11					
	Room. Exchange 11					
7:00 PM – 10:00 PM	Conference Dinner Coaches for conference dinner will be departing from outside the venue at 6:15 PM					

		Thurso	day 25 August 2022			
10:00 AM - 11:00 AM	Semi-plenary: Professor Qihua Xiong	Semi-plenary: Professor Chris Vale	Semi-plenary : Professor Miha Ravnik			
	Room: Exchange Auditorium	Room: Exchange 1	Room: Exchange 9			
11:00AM - 11:30AM			Morning Break and Posters Room: Exchange Hall			
	MC38: Controlled irradiation Disorder in Model Systems: Organisation, Dynamics, and Transformations IX	MC21: Bound States in Hybrid Superconductor Nanostructures IX	MC3: Tissue Dynamics: From in Vivo Experiments to in Silico Modelling IX	MC14: Beyond Charge Transport in Nanostructures and 2D Materials via Geometric Design IX	MC25: Emerging Trends in Many-Body Cavity Quantum Electrodynamics IX	
	Room: Exchange Auditorium	Room: Charter 1	Room: Charter 2	Room: Charter 3 Time: 11:30AM - 12:45PM	Room: Charter 4	
11:30 AM - 12:30 AM (unless	MC35: Collective Effects and Non-Equilibrium Phenomena in Quantum Gases and Superconductors IX	MC10: Nanodevice Iontronics	MC9: Recent Developments in Gas Phase Synthesis of Nanoparticles and Applications IX	MC42: Broken Ergodicity and Localisation in Quantum Many- Body Systems IX	MC51: Ultrafast Dynamics in Magnetic and Strongly- Correlated Materials IX	
stated)	Room: Exchange 1	Room: Exchange 3	Room: Exchange 4	Room: Exchange 6	Room: Exchange 7 Time: 11:30AM - 12:45PM	
	MC7: Exploring Liquid Properties in Confined Geometry (up to mesoscopic scales) IX	MC39: LONE 2022 - Localized Nonlinear Excitations in Condensed Matter IX	MC31: The Physics of Cuprates			
	Room: Exchange 9	Room: Exchange 10	Room: Exchange 11			
12:30 PM - 2:00 PM	Lunch, Posters and Special Session Special Session: Physics Publishing presented by Sami Mitra (APS), Thomas Sharp (IOPP), Tom Spicer (Springer)					
	Lunch and Posters - Room: Exchange Hall Special Session — Room: Exchange Auditorium					

	MC38: Controlled irradiation Disorder in Model Systems: Organisation, Dynamics, and Transformations X	MC22: Nanoscale Fabrication of Superconducting Devices and Their Applications X	MC3: Tissue Dynamics: From in Vivo Experiments to in Silico Modelling X	MC17: Nanomechanical and Electromechanical Systems X	MC25: Emerging Trends in Many-Body Cavity Quantum Electrodynamics X
	Room: Exchange Auditorium	Room: Charter 1	Room: Charter 2	Room: Charter 3	Room: Charter 4
2:00PM - 3:30 PM	MC8: Complex Phases in Soft Matter X	MC10: Nanodevice Iontronics X	MC9: Recent Developments in Gas Phase Synthesis of Nanoparticles and Applications X	MC42: Broken Ergodicity and Localisation in Quantum Many- Body Systems X	MC51: Ultrafast Dynamics in Magnetic and Strongly- Correlated Materials X
	Room: Exchange 1	Room: Exchange 3	Room: Exchange 4	Room: Exchange 6	Room: Exchange 7
	MC7: Exploring Liquid Properties in Confined Geometry (up to mesoscopic scales) X	MC39: LONE 2022 - Localized Nonlinear Excitations in Condensed Matter X	MC31: The Physics of Cuprates X	J. Control of the con	J
	Room: Exchange 9	Room: Exchange 10	Room: Exchange 11		
3:30 PM - 4:30 PM			Afternoon Break and Posters Room: Exchange Hall		
	MC38: Controlled irradiation Disorder in Model Systems: Organisation, Dynamics, and Transformations XI	MC22: Nanoscale Fabrication of Superconducting Devices and Their Applications XI	MC3: Tissue Dynamics: From in Vivo Experiments to in Silico Modelling XI	MC17: Nanomechanical and Electromechanical Systems XI	MC25: Emerging Trends in Many-Body Cavity Quantum Electrodynamics XI
	Room: Exchange Auditorium	Room: Charter 1	Room: Charter 2	Room: Charter 3	Room: Charter 4
4:30PM - 6:00 PM	MC10: Nanodevice Iontronics XI	MC9: Recent Developments in Gas Phase Synthesis of Nanoparticles and Applications XI	MC51: Ultrafast Dynamics in Magnetic and Strongly- Correlated Materials XI	MC7: Exploring Liquid Properties in Confined Geometry (up to mesoscopic scales) XI	MC39: LONE 2022 - Localized Nonlinear Excitations in Condensed Matter XI
	Room: Exchange 3	Room: Exchange 4	Room: Exchange 7	Room: Exchange 9	Room: Exchange 10
	MC31: The Physics of Cuprates				
	Room: Exchange 11				

Friday 26 August 2022					
9:00 AM -	MC38: Controlled Irradiation Disorder in Model Systems, Organisation, Dynamics, and Transformations XII	MC22: Nanoscale Fabrication of Superconducting Devices and their Applications XII	MC3: Tissue Dynamics: From in Vivo Experiments to in Silico Modelling XII	MC24: Quantum Electronics at Ultra-low Temperatures XII	MC10: Nanodevice Iontronics XII
10:00 AM	Room: Exchange Auditorium MC39: LONE 2022 - Localized Nonlinear Excitations in Condensed Matter XII	Room: Charter 1 MC31: The Physics of Cuprates XII	Room: Charter 2	Room: Charter 3	Room: Exchange 3
	Room: Exchange 9	Room: Exchange 11			
10:00 AM - 11:00 AM	Semi-plenary: Professor Rodrigo Martins Room: Exchange Auditorium	Semi-plenary: Professor Silke Bühler-Paschen Room: Charter 1	MC39: LONE 2022 - Localized Nonlinear Excitations in Condensed Matter XIII		
11:00 AM - 12:00 PM	Plenary: Professor Helen Gleeson		Room: Exchange 9		
	Room: Exchange Auditorium				
12:00 PM – 12:30 PM	Closing Ceremony Room: Exchange Auditorium				
12:30 PM – 1:30 PM	Lunch and Departure Room: Exchange Hall				