CMD29 Posters

Poster Number	Name	Abstract title	Session
1	Mr. Paulo Godolphim	Vertex model micro-mechanical validation in fish embryo morphogenesis	3. Physics of Tissue Dynamics
2	Quentin Guigue	Elasto-plastic properties and self-organization of tissues probed with biomimetic emulsion	3. Physics of Tissue Dynamics
3	Lorraine Montel	Adhesion percolation controls the deformation of biomimetic emulsion packings	3. Physics of Tissue Dynamics
4	Massimo Pica Ciamarra	Hexatic phase and rheological properties in model epithelial tissues	3. Physics of Tissue Dynamics
5	Jack Parker	Confined and buckled: Shapes of gel-encapsulated GUVs under osmotic shock	3. Physics of Tissue Dynamics
6	Juan Pablo Miranda	Structural and dynamical features of a suspension of active ring polymers under confinement	Emergent phenomena in soft, active and biological matter
7	Mr Peter Starrs	Molecular Dynamics Studies of the Conformational Free Energies of Xylan Glycosidic Linkages and the Flexibility of Xylan Chains	 Emergent phenomena in soft, active and biological matter
8	Riya Nandi	Oscillations in cell cycle times in Drosophila abdomen modelled as cell phase synchronization	 Emergent phenomena in soft, active and biological matter
9	Gabriel Amselem	Flows induced by a capsule of microalgae	Emergent phenomena in soft, active and biological matter
10	Mr. C. Miguel Barriuso Gutierrez	Discovering dynamic laws from observations: the case of self- propelled, interacting colloids	Emergent phenomena in soft, active and biological matter
11	Nadir Möller	Writing In Water	Emergent phenomena in soft, active and biological matter
12	Lirong Zheng	Universal dynamical onset in water at distinct material interfaces	7. Confined and mesoscopic
13	Thanaphun Jitniyom	Liquid-infused stainless steel and different types of polymer surfaces	7. Confined and mesoscopic
14	Huanjun Lu	Frustrated Layered Self-assembly Induced Superlattice from Two-Dimensional Nanosheets	8. Complex Phases in Soft Matter
15	Rasha Algethami	Modelling Crystallisation in Polymers	8. Complex Phases in Soft Matter
16	Ms. Vidhika Punjani	Observation of long-range TGBA phase, polar order and thermochromic behaviour in a chiral bent-shaped liquid crystals	8. Complex Phases in Soft Matter
17	Kutlwano Gabana	Fddd - A liquid crystal phase of rotating quadrupoles	8. Complex Phases in Soft Matter

18	Mr Omar-farouk Adesida	Exploring the Phase Behaviour of Hard-Sphere Dimers	8. Complex Phases in Soft Matter
19	Dr Ruibin Zhang	Orientational transitions of discotic columnar liquid crystals in cylindrical pores	13. Topological and geometrical effects
20	Prof. Dr. Erich Runge	Structural and Optical Properties of Gold Nanosponges	13. Topological and geometrical effects
21	Rongsheng Cai	Understanding Wet Impregnation Synthesis for Sustainable Hydrogenation Catalysts via In-situ TEM Observation	9. Gas phase synthesis of nanoparticles
22	Miss Celina Hellmich	Development of manufacturing processes for coordinate-based 3D µ-standarts	18. High-resolution scanning probe microscopy
23	Mr Haoxuan Ding	Complex Supramolecular Tessellations with On-surface Self- Synthesized C60 Tiles through van der Waals Interaction	18. High-resolution scanning probe microscopy
24	Dr. María Tenorio	Doped Nanoporous graphene as a new material for ultrasharp superlattice heterojunctions	12. Physics in 2D Nanoarchitectonics
25	Serni Toda Cosi	Decoupling nanoporous graphene from the metallic catalytic template by intercalation of self- assembled monolayers in ultra-high vacuum	12. Physics in 2D Nanoarchitectonics
26	Xabier D. de Cerio	Exploring the electronic and transport properties of Li- decorated nanoporous graphene	12. Physics in 2D Nanoarchitectonics
27	Kevin Garcia Diez	Engineering the Electronic properties of 2D Quantum Materials with Tunable Superlattices	12. Physics in 2D Nanoarchitectonics
28	Maryam Azizinia	The nanostructured MoO3 films prepared by electrospray: A new way for technologial devices	17. Nanomechanical and electromechanical systems
29	Mariana Gomes	Influence of sintering methods on piezoelectric K0.5Na0.5NbO3 ceramics	17. Nanomechanical and electromechanical systems
30	Ms. Stella Gries	Fabrication of Hierarchical Porous Silicon and Fused Silica by Means of Silver Nanoparticle- Catalyzed Chemical Etching	17. Nanomechanical and electromechanical systems
31	Dr. Gianluca Rastelli	Resonant nonlinear response of a nanomechanical system with broken symmetry	17. Nanomechanical and electromechanical systems
32	Gabriel Margiani	State Lifetime of a Synthetic Two-Level System	17. Nanomechanical and electromechanical systems
33	Minxing Xu	Superconducting Casimir Effect: The interplay between two famous quantum effects	17. Nanomechanical and electromechanical systems
34	Parvinder	Role of coherence and degeneracies in quantum synchronization	20. Quantum thermodynamics
35	Mr Aiden Daniel	Study of Experimental Regimes for the Observation of Quantum Many-Body Mixed phase space	42. Broken ergodicity and localisation

36	Maria Tudorovskaya	Fermion-boson interacting systems in InQuanto software package	25. Cavity quantum electrodynamics
37	Campbell Mclauchlan	Fermion-Parity-Based Computation and its Majorana-Zero-	21. Bound states in hybrid
		Mode Implementation	superconductor nanostructures
38	Elis Roberts	From quantum tunneling in a topology-changing fermionic bath	21. Bound states in hybrid
		to topological quantum superpositions	superconductor nanostructures
20	Di Xu	Realizing a minimal Kitaev chain in coupled quantum dots	21. Bound states in hybrid
			superconductor nanostructures
10	Mátvás Kocsis	Signatures of the nonlocal Josephson effenct in Andreev-	21. Bound states in hybrid
		molecules	superconductor nanostructures
<i>A</i> 1	Mr Ben Blain	Coherent Transport of Quantum Solitons in Superconducting	23. Superconducting circuits for
		Circuits	quantum technologies
10	Manognya Achanya	A fully automated wafer-scale cryogenic measurement system	23. Superconducting circuits for
42	ivianogriya Acharya	for superconducting quantum circuit characterization	quantum technologies
10	Desislava Atanasova	Towards a dissipative sat gubit in a 2D sizeuit OED architecture	23. Superconducting circuits for
45	Desisiava Ataliasova	Towards a dissipative cat qubit in a 5D circuit QED architecture	quantum technologies
44	Marius Hegedus	Cryogen-free Scanning Gate Microscope for the interrogation of coherence limiting defects in superconducting quantum circuits at millikelvin temperatures	23. Superconducting circuits for quantum technologies
45	James Hague	Arrays of optical tweezers and dressed Rydberg atoms for quantum simulators of electron-phonon interaction and multi band effects.	36. Quantum computers and condensed matter physics
46	Kouidri Smail	Finite temperature chemical potential of Bose gas in harmonic trap	24. Ultra cold quantum electronics
47	Francis Bettsworth	On-chip demagnetisation cooling of electrons	24. Ultra cold quantum electronics
48	Matthew Green	Tabletop room temperature electron spin resonance spectrometer measurements from 30 to 600 MHz	24. Ultra cold quantum electronics
49	Dylan Jones	Scattering of a diffracted electron wave from nanoscale potential barriers on graphene	24. Ultra cold quantum electronics
50	Max Taylor	Graphene Josephson junctions for microwave devices	24. Ultra cold quantum electronics
51	Emily Gamblen	Exploring Applications of Graphene-Based Josephson Junctions	24. Ultra cold quantum electronics
52	Prof Ling Hao	Developing a SLUG Microwave Amplifier for Axion Detection	28. Quantum technology for dark matter
53	Deepanjan Das	Cryogenic electronics for the QSHS microwave axion search	28. Quantum technology for dark matter

54	Bertrand Dupé	Exploring possible materials for mobile qubits	41. Topological matter
55	Rafael D. Soares	Dynamic Build-Up of Mesoscopic Quantum Entanglement by Quantum Spin-Transfer Torque Effect	41. Topological matter
56	Robin Smeyers	Electronic properties of multilayer graphene on hBN for different stacking configurations of hBN	41. Topological matter
57	Henrique P. Veiga	Simulating Mesoscopic Transport on Finite Systems with Space- Modulating Hoppings	41. Topological matter
58	Dr Elisa Castanon	Interfacial ferroelectricity in marginally twisted 2D semiconductors studied via KPFM	16. Twisted van der Waals heterostructures
59	Alexander Kazantsev	Quantum linear magnetoresistance from the classical point of view	52. Combining organic molecules and 2D materials
60	Edward Black	First-Principles Investigation of the Electronic Properties of 2-D Organic-TMDC Heterostructures	52. Combining organic molecules and 2D materials
61	Mr Birkan Emrem	Controlling the Shape of finite 2D Systems by Surfactants	52. Combining organic molecules and 2D materials
62	Dominik Hanisch	Nanopatterning of YBa2Cu3O7-x by gallium focused ion beam	22. Nanoscale fabrication of superconducting devices
63	Pierre Couture	"Total" Ion Beam analysis and 3D imaging of thin films using MeV ion beams technique: latest development at Surrey Ion Beam Centre to characterise material composition	48. Thin films: structure, characterisation, and applications
64	Emma Bryan	Investigating the templating effect of patterned ferroelectric substrates on molecular semiconductor growth using PFM and KPFM	48. Thin films: structure, characterisation, and applications
65	Petr Klapetek	Force volume data processing for advanced electrical SPM experiments	48. Thin films: structure, characterisation, and applications
66	M.sc Ephraim Thomas Mathew	Study of surface enhanced Raman spectroscopy effect on surface reconstructed Al2O3 substrate	48. Thin films: structure, characterisation, and applications
67	Dr. Plácida Rodríguez-Hernández	Dynamical and elastic properties of Cd2V2O7 under high- pressure from ab initio simulations	46. Matter under high pressure
68	Marek Eggen	The theoretical and experimental study of single ion magnets based on the Ho(III)-EDTA and Dy(III)-EDTA complexes in various environments: the influence of the structural changes on the spectroscopic and magnetic properties	46. Matter under high pressure
69	Gabriel Kipkemei Chirchir	Structural, Electronic and Mechanical Properties of Re Doped FeMnP 0.67A 0.33 (A=Ga and Ge): A DFT Study	46. Matter under high pressure

70	Prof. Alfonso Muñoz	High pressure study of CsPbBr3: dynamical and mechanical stability	46. Matter under high pressure
71	Mr Wenjia Li	All-optical switching in Co/Pt multilayers	51. Ultrafast Dynamics
72	Sam Perrett	Application of Density Matrix Wigner Transforms for Ultrafast X- ray Crystallography	51. Ultrafast Dynamics
74	Yehonadav Bekenstein	Free electron triggered superfluorescence from self-assembled nanocrystals.	51. Ultrafast Dynamics
73	Dr. Xiaowen Shi	Characterization of Topological Defects and Phase Transitions in Nanocrystals Ferroelectrics using coherent diffraction imaging	47. X-ray Free Electron Lasers