



## Lightning Talks

|    | Poster Presenter  | Poster Title  |
|----|---|---|
| 1  | Ben Durham, University of York  | Open Boundary Conditions and Implicit Solvation Calculations in CASTEP using DL MG  |
| 2  | Callum Watson, British Geological Survey  | Enabling a better global view of the magnetic field of Earth's rocks  |
| 3  | Carlos Edgar Lopez Barrera, Queen Mary University of London                         | Computational Insights for Individualized Atrial Fibrillation Treatments  |
| 4  | Chi Cheng (Cecilian) Hong, University of Edinburgh                                  | Insight into the Correlated Disorder of Fumarate- Based MIL-53 Frameworks: A Computational Study of Free-Energy Landscape                       |
| 5  | Ivan Tolkachev, University of Oxford  | Large scale atomistic simulations of nanocrystalline Iron formation and its irradiation performance   |
| 6  | Joel Hirst, Sheffield Hallam University   | Spin-Waves: A potential route to more efficient data transmission, storage and processing   |
| 7  | Joseph Prentice, University of Oxford   | Computing infra-red spectra using finite differencing in CASTEP   |
| 8  | Juan Herrera, EPCC, The University of Edinburgh                                     | MONC Performance Portability  |
| 9  | Kevin Stratford, EPCC, The University of Edinburgh                                  | MPI+X on ARCHER2: observations from Ludwig  |
| 10 | Ludovica Cicci, Imperial College London   | A multi-scale analysis of the impact of measurement and physiological uncertainty on electrocardiograms   |
| 11 | Mara Strungaru, University of York  | Implementing spin-lattice dynamics within the VAMPIRE software package  |
| 12 | Marina Strocchi, Imperial College London & King's College London                    | Linking Molecular to Whole-organ Function Using Multi-scale, Multi-physics Four-chamber Computational Models                                    |
| 13 | Martin Plummer, STFC Scientific Computing Department (Daresbury Laboratory)         | Multi-Layered MPI parallelisation for the R-matrix with time-dependence code  |
| 14 | Matt Smith, University of York  | Future-proof Parallelism for Plane-Wave Density Functional Theory   |
| 15 | Matthias Frey, University of St Andrews   | EPIC: The Elliptical Parcel-In-Cell method  |
| 16 | -   |   |
| 17 | Paul Bartholomew, EPCC, University of Edinburgh                                     | Adding ADIOS2 to the Xcompact3D CFD code  |
| 18 | Pavel Stishenko, Cardiff University   | Implementing an implicit solvent model in a periodic DFT code   |
| 19 | Sean Mashallsay, Queen's University Belfast   | Unravelling Attosecond Dynamics: A General Approach To Ultrafast Atomic Simulations   |
| 20 | Steven Boeing, University of Leeds  | Small-scale mixing in a parcel-based model of moist convection  |
| 21 | Stuart Morris, University of Warwick  | Laser-plasma instabilities at Shock Ignition scales   |
| 22 | Tobias Slade-Harajda, University of Warwick   | The consequences of tritium mix for simulated ion cyclotron emission spectra from deuterium-tritium plasmas                                     |
| 23 | Vinush Vigneswaran, The University of Edinburgh – Centre for Cardiovascular Science | OpenEP Workbench: A computational platform for identifying fibrotic regions and conduction disturbances in the atria using conduction velocity. |
| 24 | Hannah Menke, Heriot-Watt University  | Introducing GeoChemFoam to Archer2  |
| 25 | Nick Brown, EPCC, The University of Edinburgh                                       | ExCALIBUR: An exascale software programme   |