

# **Scottish Soft Matter Workshop**

**Wednesday 12 February 2025 - Wednesday 12 February 2025**

**James Clerk Maxwell Building**

## **Scientific Programme**

09:00-09:50 **Registration**

09:50-10:00 **Welcome by the organisers**

**Session 1** (Chair Tyler Shendruk)

10:00-10:30 Invited talk 1: Lynn Paterson - 3D microrheology using Optical Tweezers with Integrated Multiplane Microscopy

10:30-11:00 Invited talk 2: Juliane Simmchen - Beyond spheres - new shapes for active matter

11:00-11:15 Contributed talk 1: James Richards - From model suspensions to industrial challenges in chocolate and cement

11:15-11:45 **Coffee break**

**Session 2** (Chair Apala Majumdar)

11:45-12:15 Invited talk 3: Luke Davis - Control of continuous and discrete-state active matter

12:15-12:30 Contributed talk 2: Ben Goddard - An Introduction to (Dynamic) Density Functional Theory

12:30-12:45 Contributed talk 3: Alexander Houston - Spontaneous Oscillations in Heterogeneous Active Nematics

12:45-13:00 Contributed talk 4: Grazia De Angelis - Developing new multiscale models leveraging ML to advance the understanding of fluid transport in polymers

13:00-14:30 **Lunch**

**Session 3** (Chair Halim Kusumaatmaja)

14:30-15:00 Invited talk 4: Marcelo Dias - Exploring Damage in Mechanical Metamaterials

15:00-15:30 Invited talk 5: Rebecca Walker - Structure-property relationships in ferroelectric nematicogens

15:30-15:45 Contributed talk 5: Joseph Kilbride - Growing droplets in evaporating breath figures due to the Kelvin effect

15:45-16:15 **Coffee break**

**Session 4** (Chair Rastko Sknepnek)

16:15-16:45 Invited talk 6: Ulrich Zachariae - Modelling biological membranes and membrane-integral proteins under realistic voltage conditions

16:45-17:00 Contributed talk 6: Sravana Chaithanya Kanala Venkata - Vertex model with internal dissipation enables sustained flows

17:00 - 17:30 **Closing remarks/discussion**

**Dinner**

19:30 - Hotel du Vin (11 Bristo Pl, Edinburgh EH1 1EZ)