



Non-Newtonian Club 2025

Constitutive Modelling and Flow Transitions in
Complex Fluids:
Bridging Fundamentals and Applications

**University of Liverpool,
Friday 5th September**

Key Topics

- Advances in constitutive equation development and model validation,
- Experimental characterisation of flow transitions and instabilities,
- Industrial case studies where rheological modelling has informed design or process optimisation,
- Emerging approaches in data-driven modelling and hybrid frameworks that integrate machine learning with physical insight.

Invited Speakers

Dr Andrew Clarke

SLB Cambridge Research

Dr Chris Ness

University of Edinburgh

Special Session

Tour of the Materials Innovation Factory - a state-of-the-art facility for advanced materials excellence and expertise.

To contribute an oral or poster presentation, please submit a title and 200 word abstract to Dr Rishav Agrawal (R.Agrawal@liverpool.ac.uk) by **Friday 25th July 2025**.