

# Mini-Workshop

## Driven soft materials and collective cell mechanics

Thursday November 26, 13h30-17h30  
Salle de conférence, LIPhy

The physics of out-of-equilibrium driving in soft matter has been studied extensively in recent years, in the context of sheared materials such as colloids, foams or granular matter. Both theoretical approaches, such as mesoscopic models and molecular dynamics simulations, and experimental approaches including confocal microscopy and (micro)-rheology have been developed and provided a lot of insight.

This short meeting will focus on both traditional areas of soft driven materials, and an interesting, recent direction: Collective cell mechanics, driven by internally generated active forces.

### Program

13h30 H el ene Ayari-Delano e (ILM, Lyon)  
*Biorheology in vitro: from cell to tissue*

14h05 Kirsten Martens (LIPhy)  
*Mean-field approach for the rheology of tissues*

14h40 Silke Henkes (ICSMB, U. Aberdeen)  
*Mechanics of dense active matter*

15h15 Coffee break

15h45 Ludovic Berthier (L2C, Montpellier)  
*Collective motion in dense active materials*

16h20 Guillaume Duclos (Institut Curie, Paris)  
*Active cellular nematics*

16h55 Giovanni Cappello (LIPhy)  
*Multicellular aggregates under pressure*

