

Master 2 ICFP - Physics of Multicellular Systems

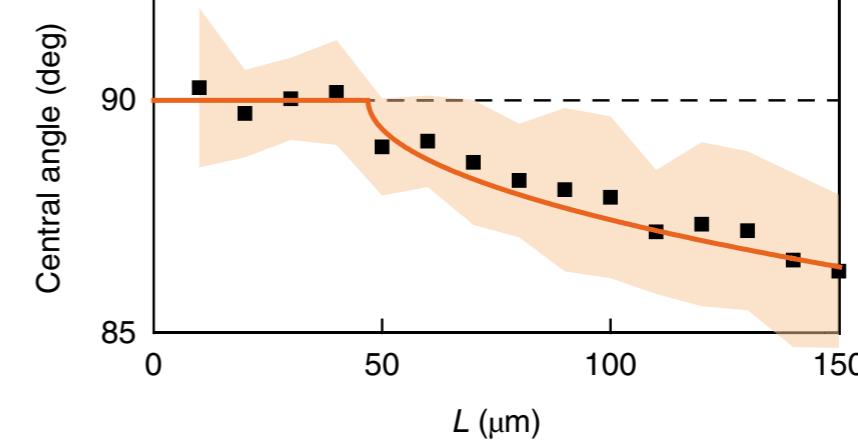
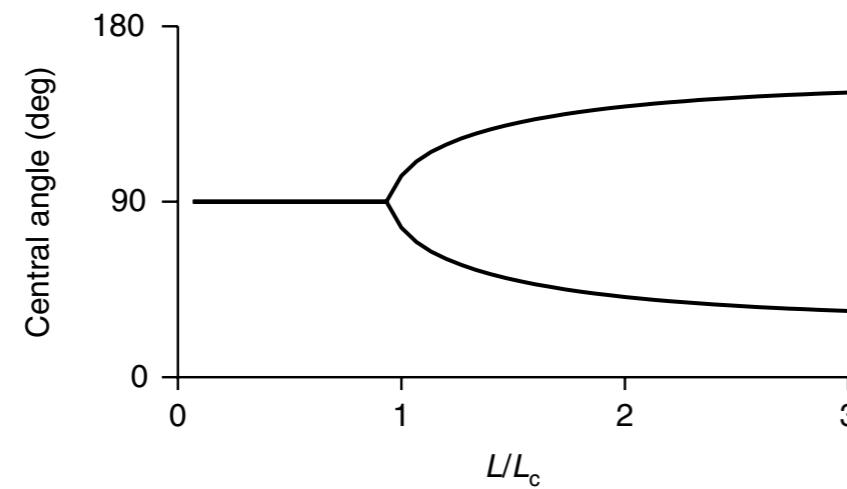
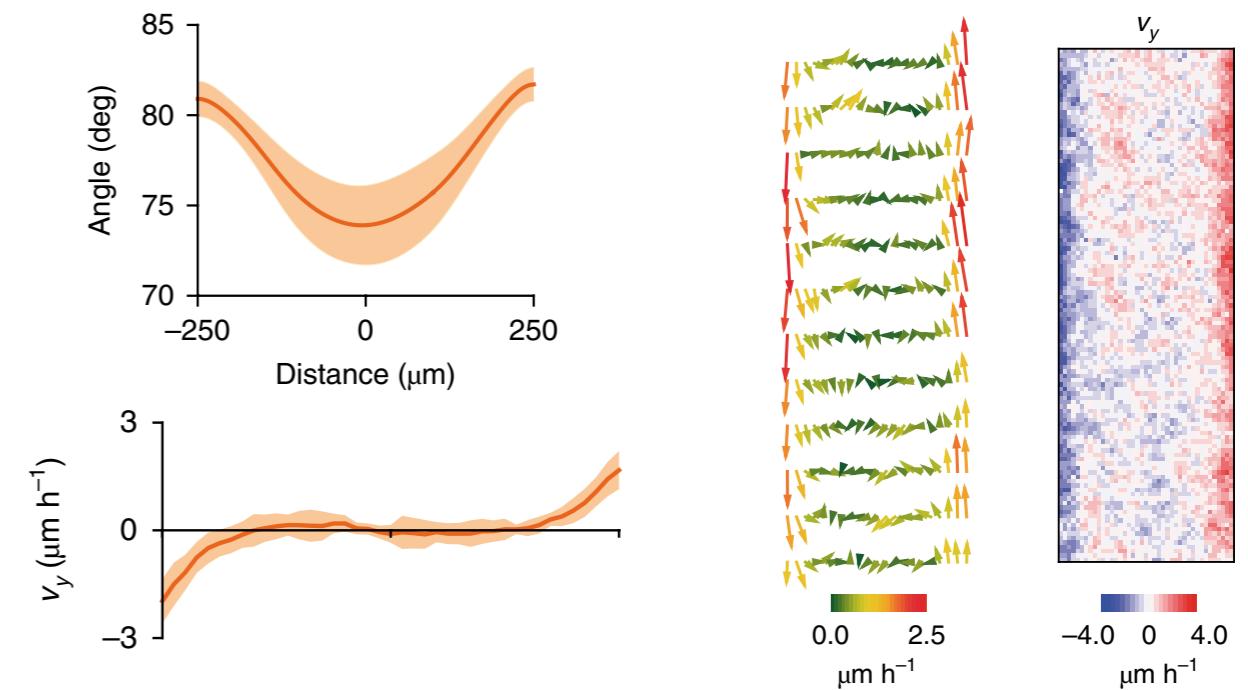
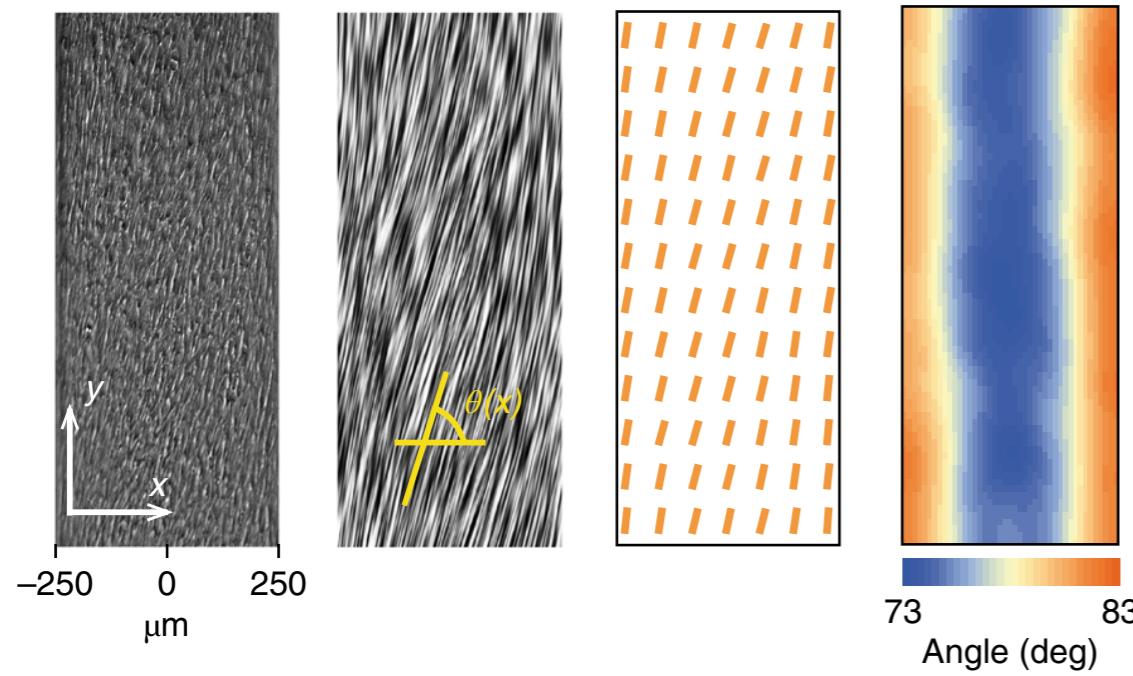
Lesson 7-8

Continuous models of tissues

Hervé Turlier - March 21 and 28th 2022

Cellular nematics

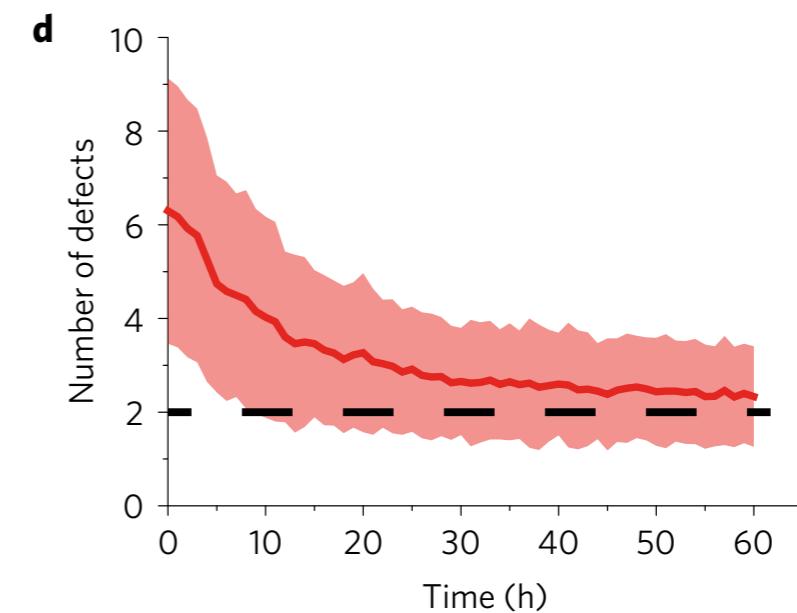
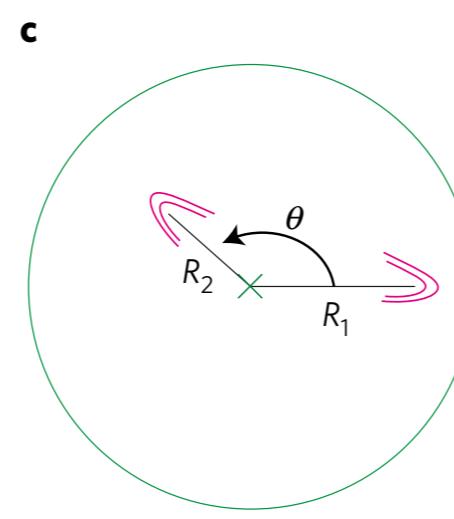
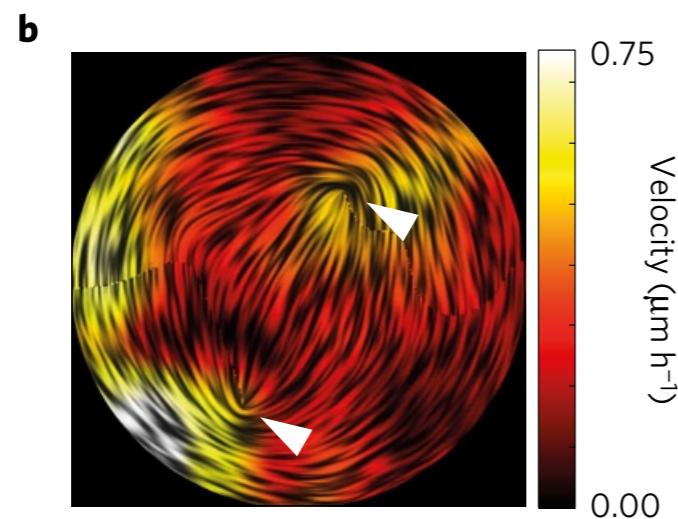
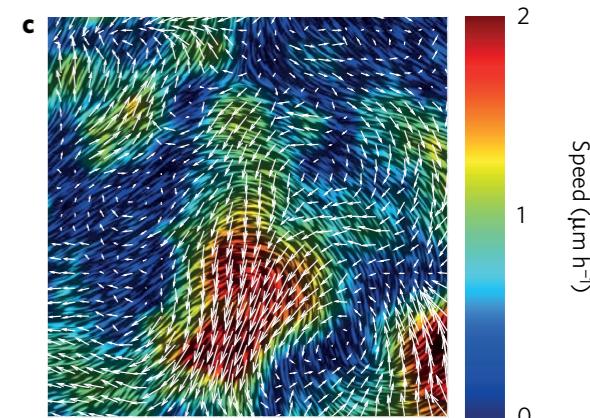
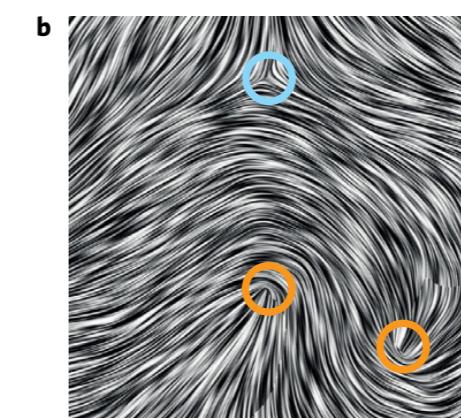
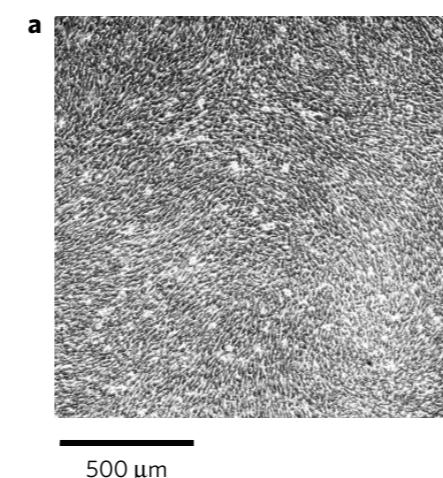
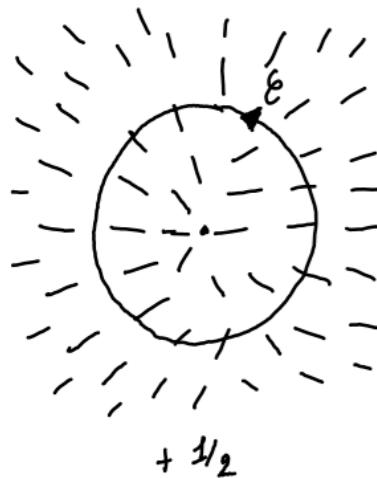
Spontaneous shear flow in confined cellular nematics
Duclos et al. *Nat Phys* 2018



Cellular nematics

Topological defects

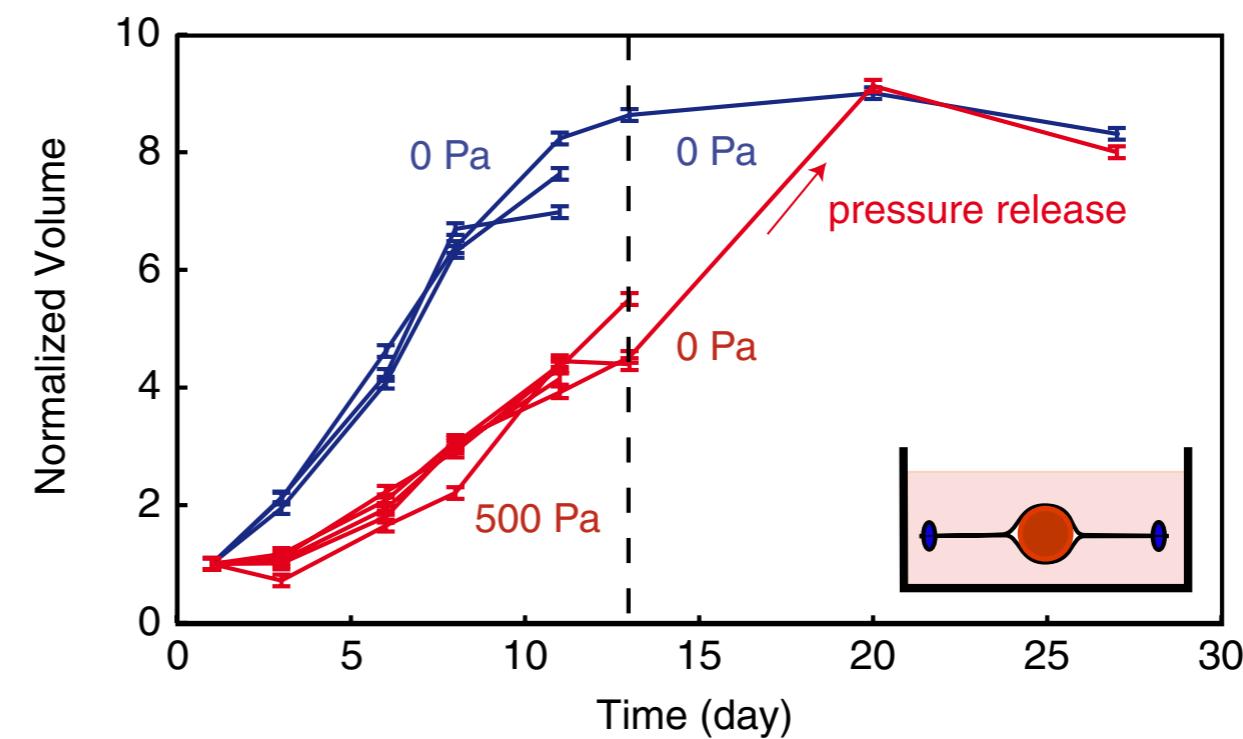
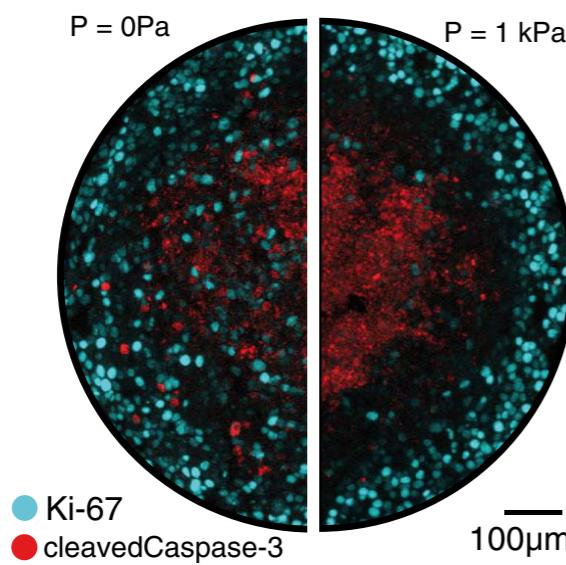
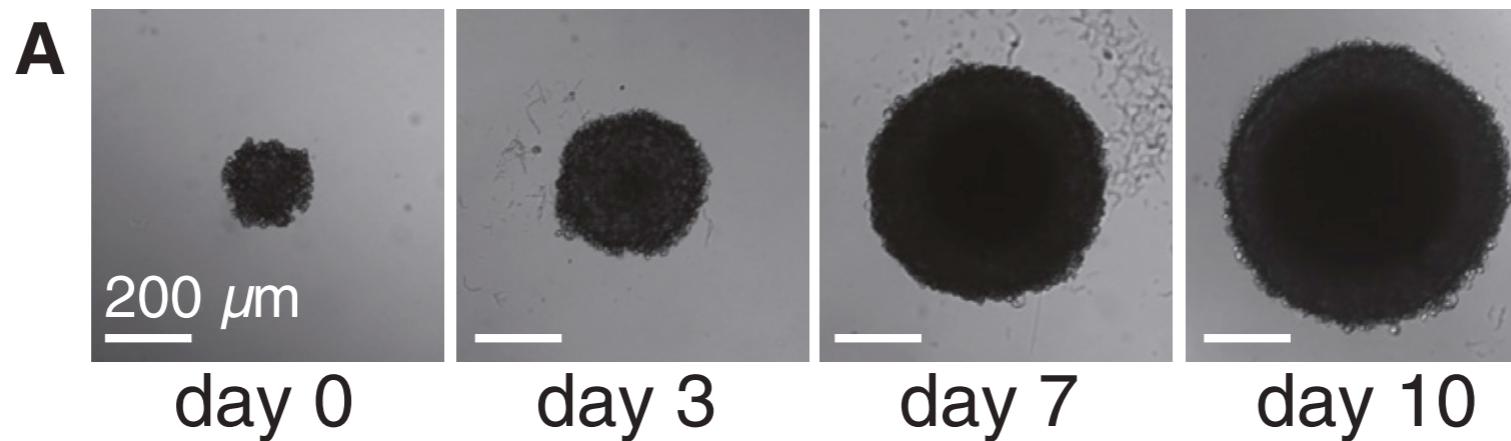
Duclos et al. *Nat Phys* 2016



Spheroid growth and homeostasis

Montel et al. *PRL* 2011

Delarue et al. *PRL* 2013, *Biophys J* 2014



Spheroid growth and homeostasis

Delarue et al. *New J Physics* 2012

