

## **CONTINUUM APPROACH TO LIVING MATTER (by J. Casademunt)**

### **BIBLIOGRAPHY:**

#### **Lectures 2 and 3**

Reviews on active polar gels:

*Active behavior of the cytoskeleton*

F. Jülicher, K. Kruse, J. Prost, J.-F. Joanny

Phys. Rep. 449, 3 (2007)

*Active gel physics*

J. Prost, F. Jülicher, J.-F. Joanny

Nature Physics 11, 111 (2015)

#### **Lecture 3**

Example:

Spontaneous flow transition in active polar gels

R. Voituriez, J.-F. Joanny, J. Prost

EPL 70, 404 (2005)

#### **Lecture 4**

Applications:

*Morphology and growth of polarized tissues*

C. Blanch-Mercader, J. Casademunt, J.-F. Joanny

Eur. Phys. J. E 37, 41 (2014)

*Spontaneous motility of actin lamellar fragments*

C. Blanch-Mercader, J. Casademunt

Phys. Rev. Lett. 110, 078102 (2013)

*Nonlinear waves and weak turbulence in expanding epithelia*

C. Blanch-Mercader, J. Casademunt

(unpublished)

#### **Further readings in cell motility**

Contractility and retrograde flow in lamellipodium motion

K. Kruse, J.-F. Joanny, F. Jülicher, J. Prost

Phys. Biol. 3, 130 (2006)