

# Chapter VIII

## Spontaneous flow in an active fluid: a model for cellular motion

### I) Setup of the problem

### II) Alignment fields

### III) Evolution equation

1. Radial force balance
2. Double-check: the linear case
3. Force amplification

### IV) Flow profiles

1. Linear stability
2. Steady-state flow

### V) Discussion

#### References:

Voituriez, Joanny & Prost, *Europhys. Lett.* **70**, 404 (2005)

Sanchez *et al.*, *Nature* **491**, 431 (2012)