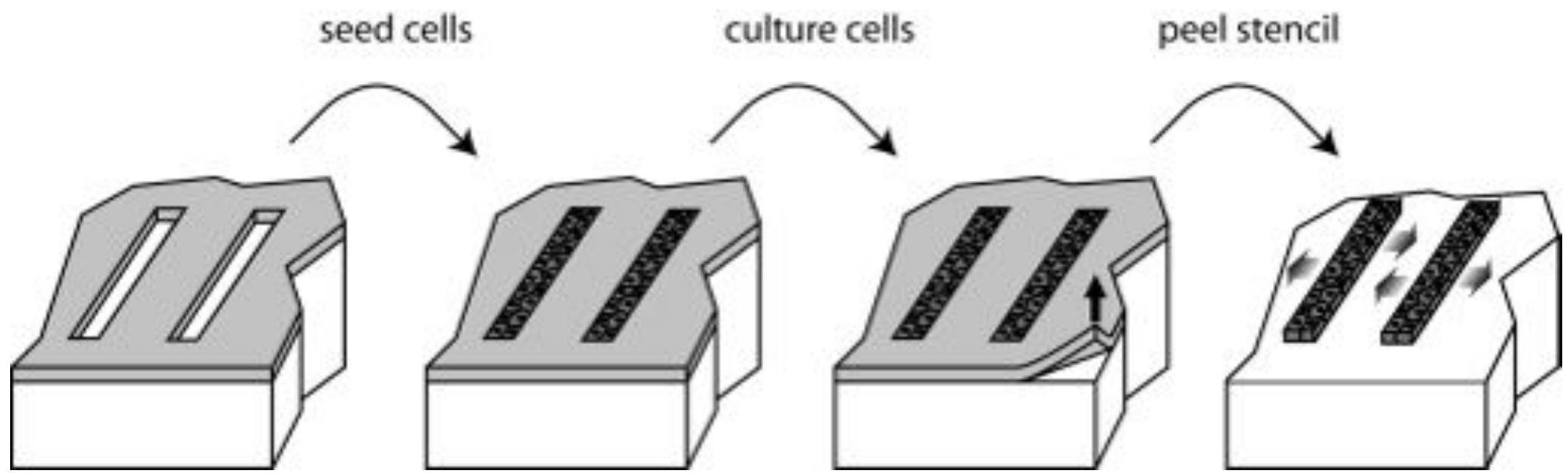


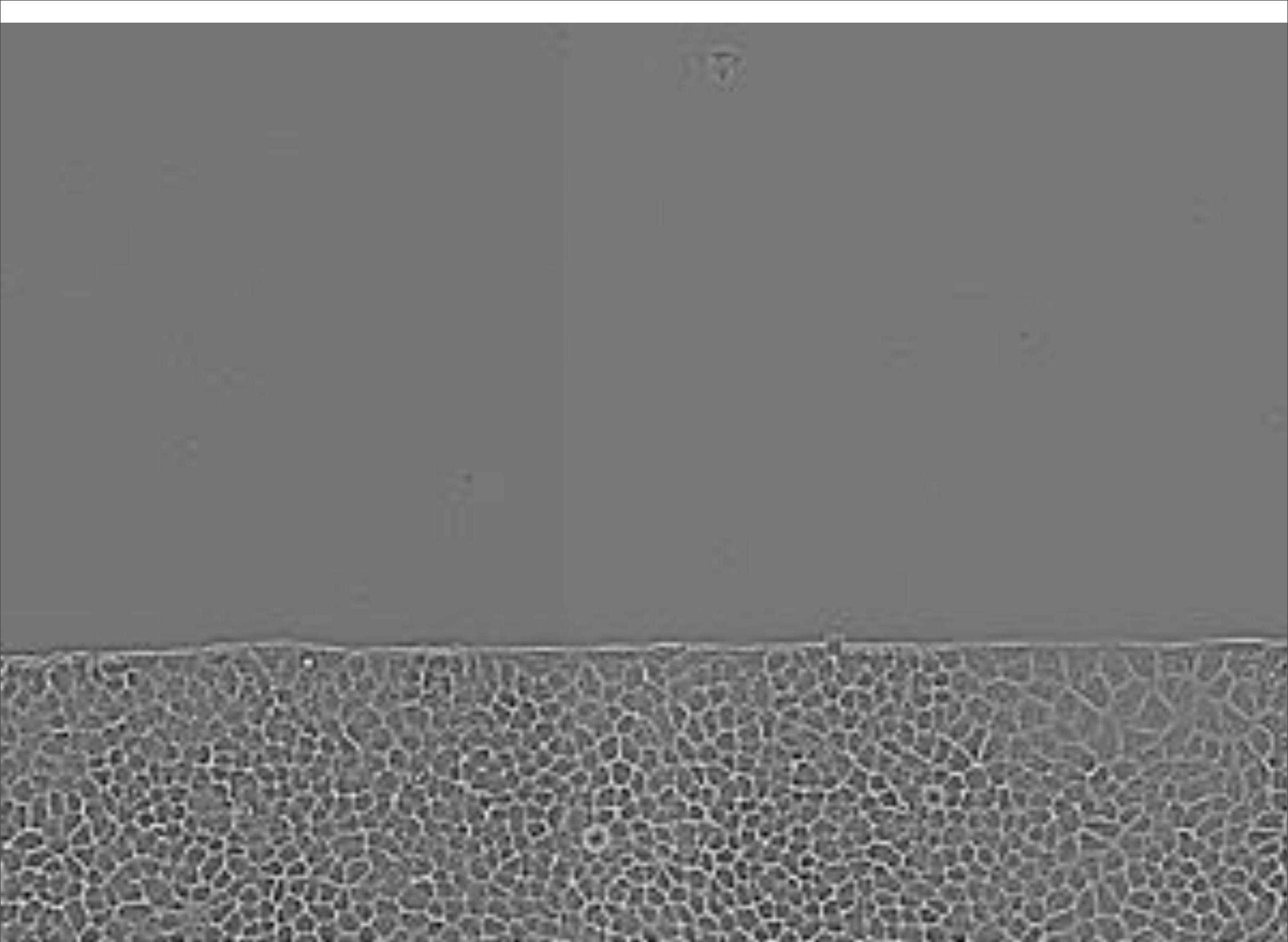
Movimientos colectivos celulares en un epitelio pueden ser cuantitativamente descritos por un modelo estocástico de partículas puntuales

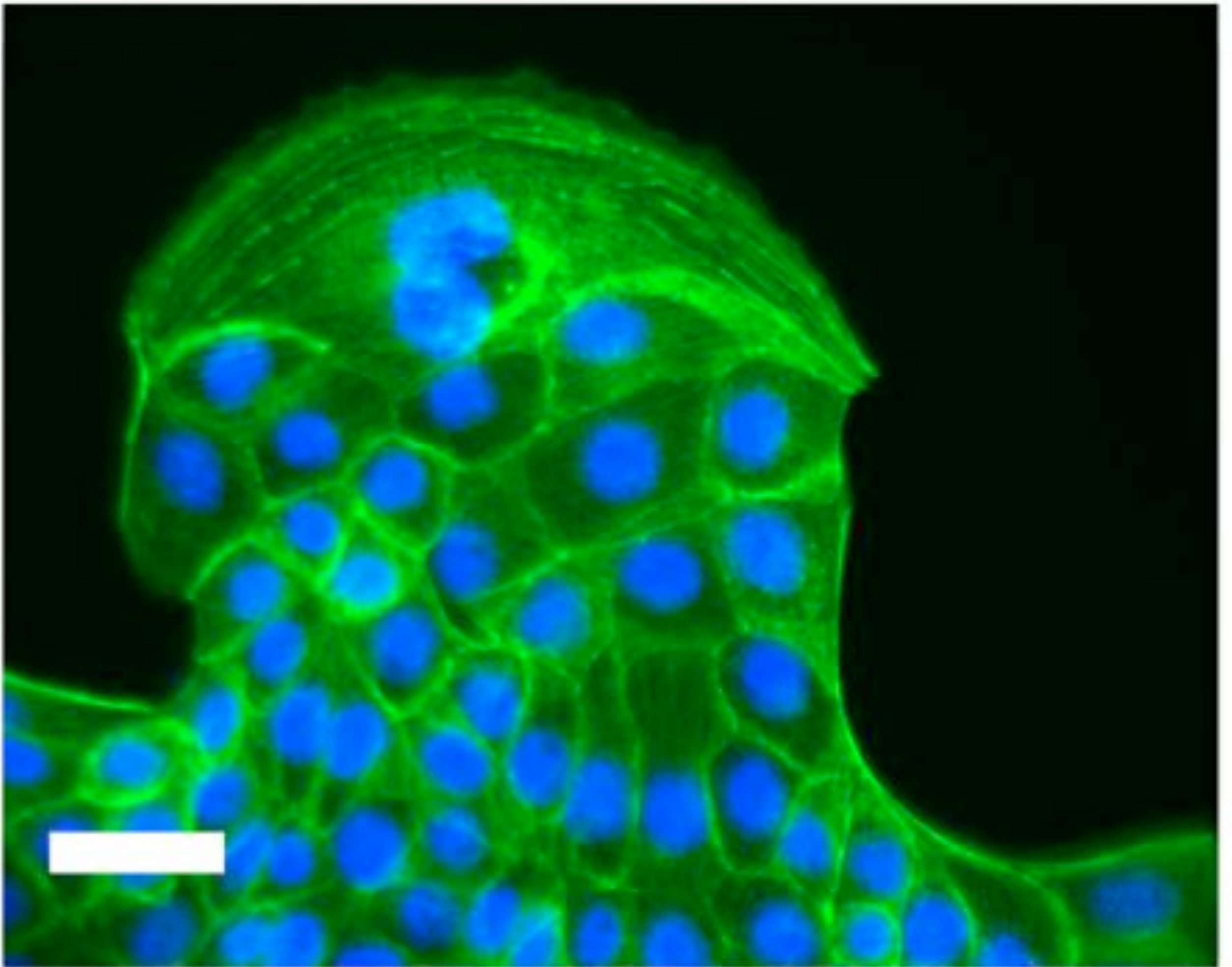
Néstor Sepúlveda

Departamento de Física, FCFM, Universidad de Chile



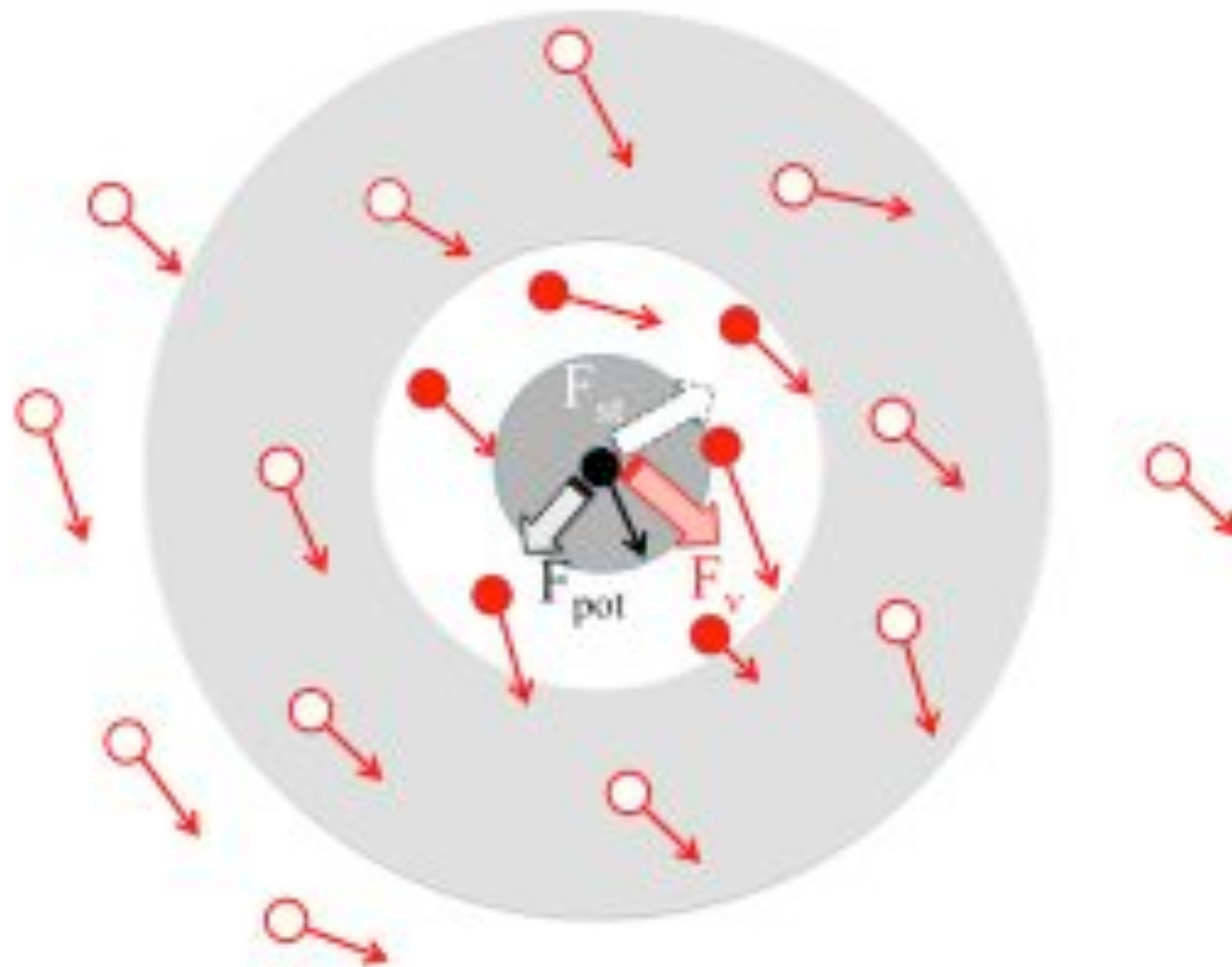




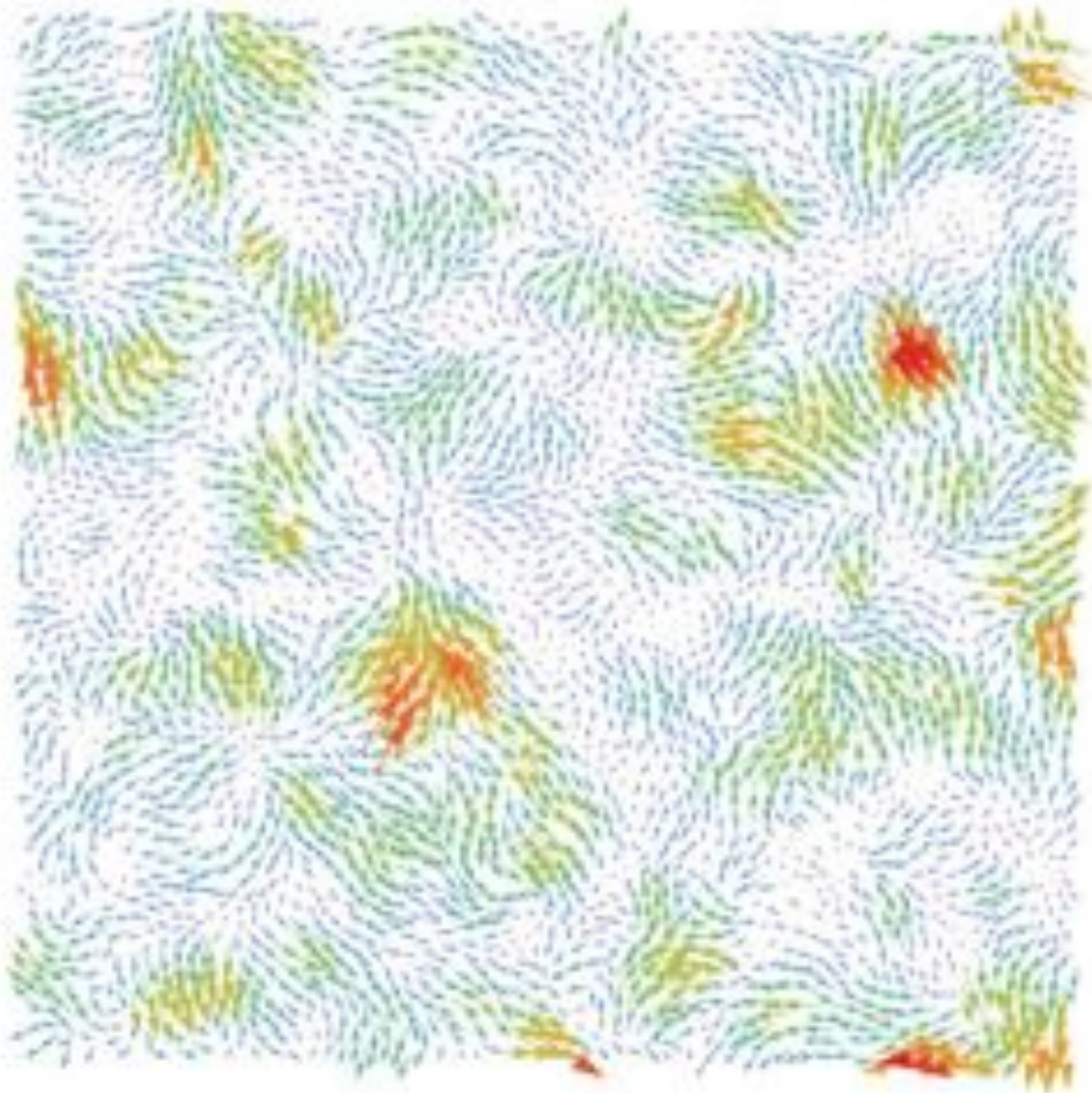


Modelo

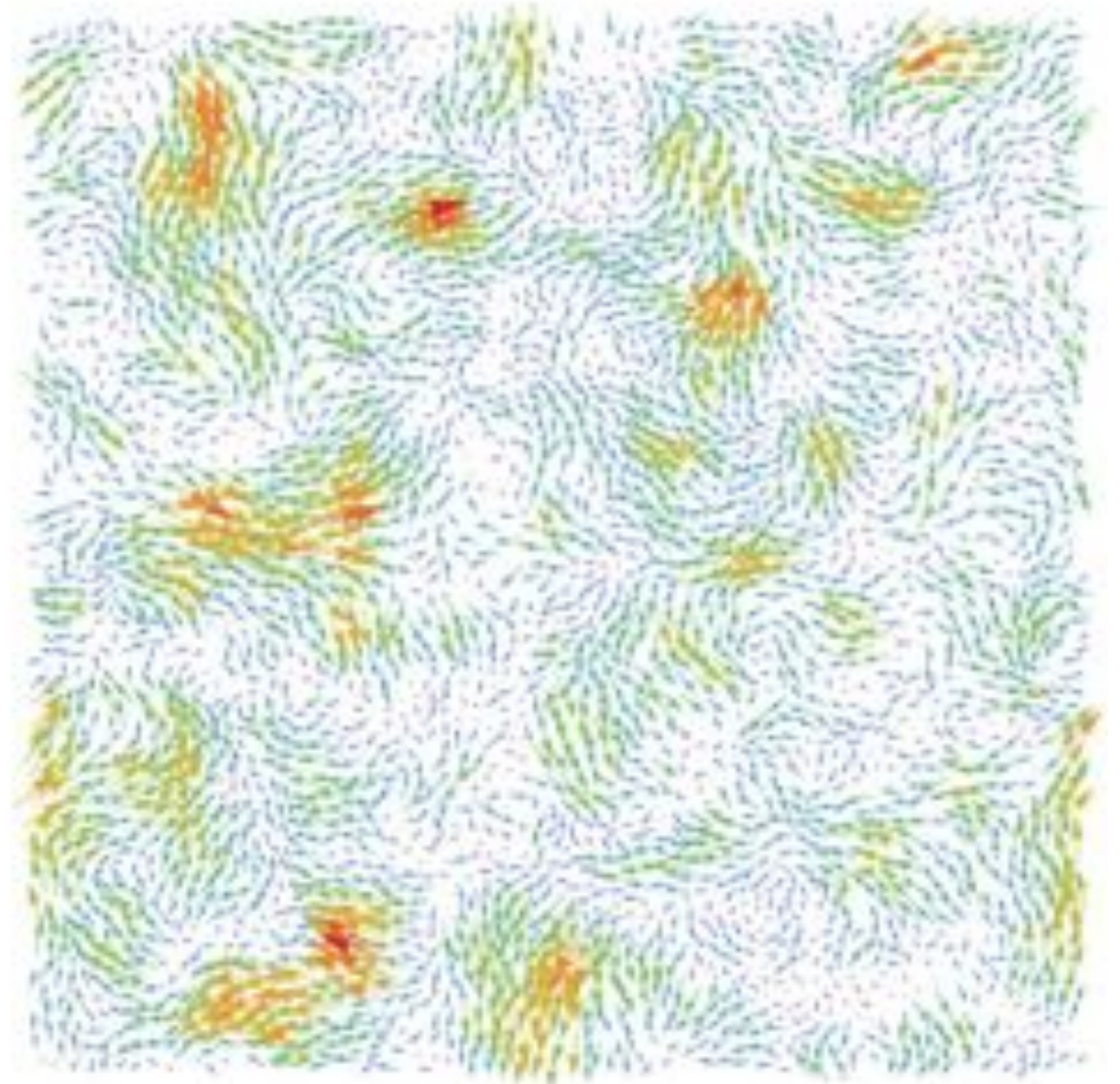
$$\frac{d\mathbf{v}_i}{dt} = -\alpha\mathbf{v}_i + \sum_{j \text{ n.n. of } i} \left[\frac{\beta}{N_i} (\mathbf{v}_j - \mathbf{v}_i) + \mathbf{f}_{ij} \right] + \sigma(\rho_i)\boldsymbol{\eta}_i.$$

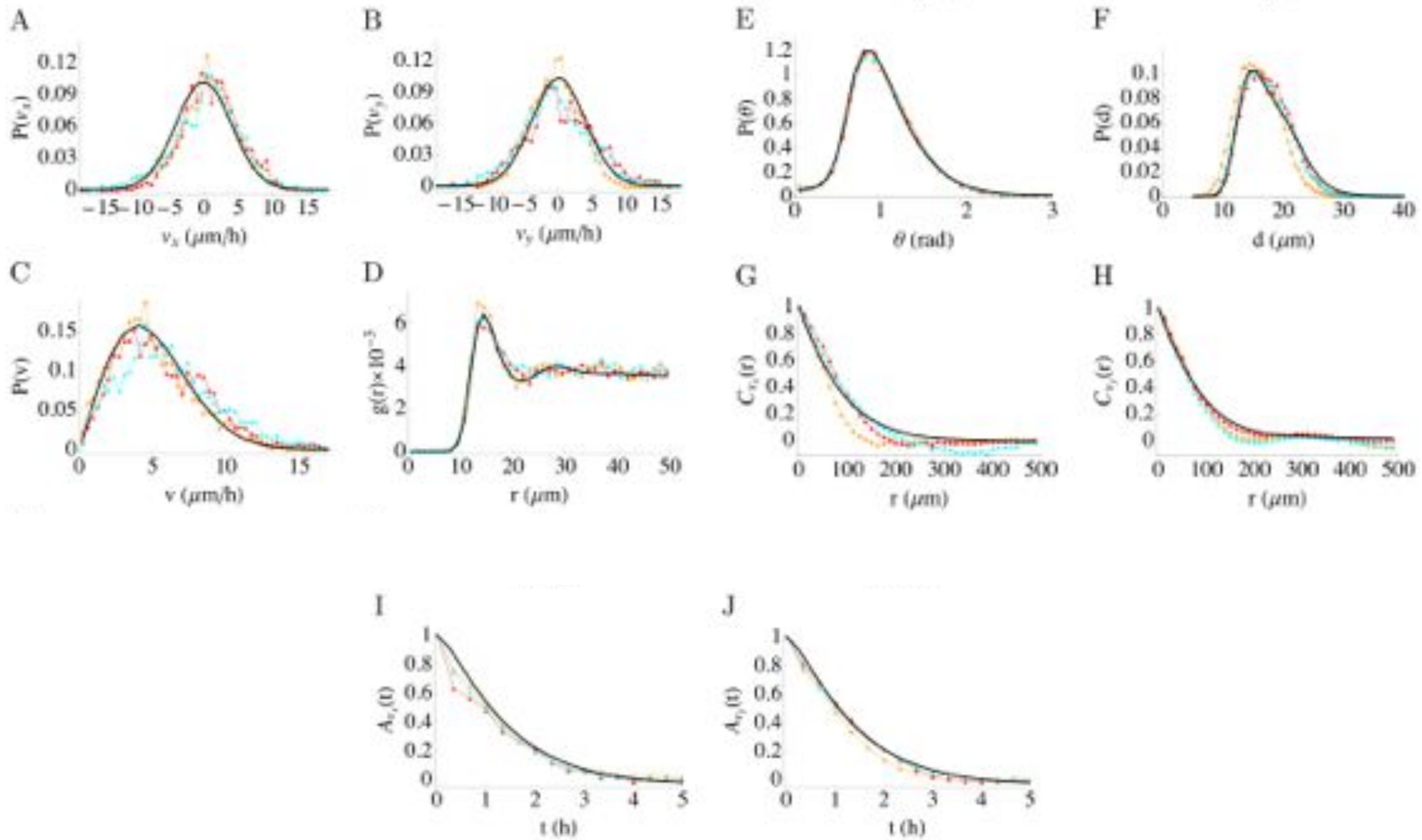


A

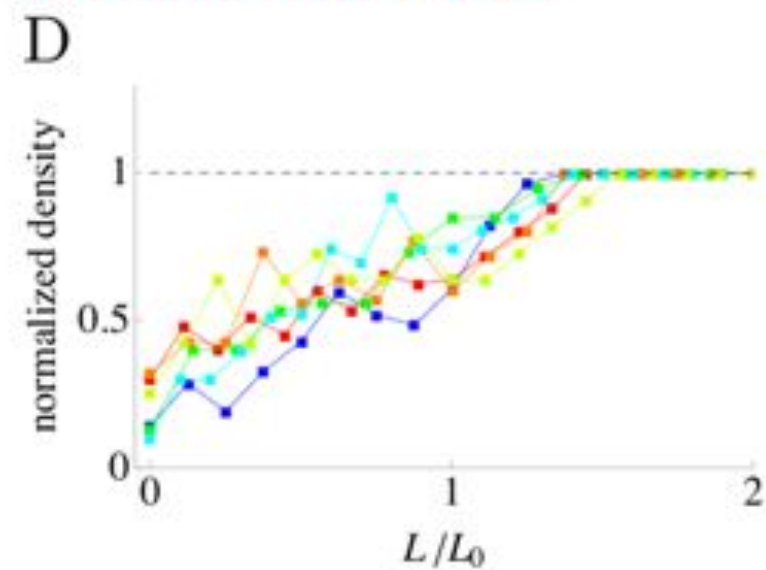
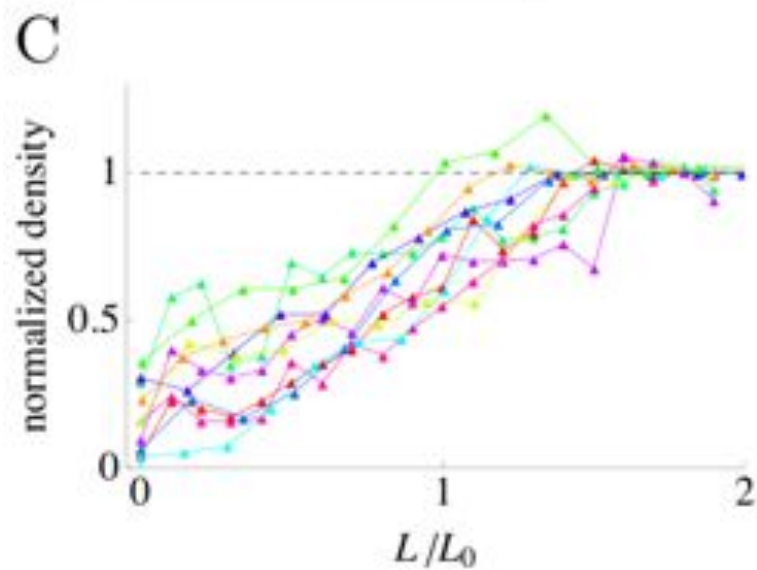
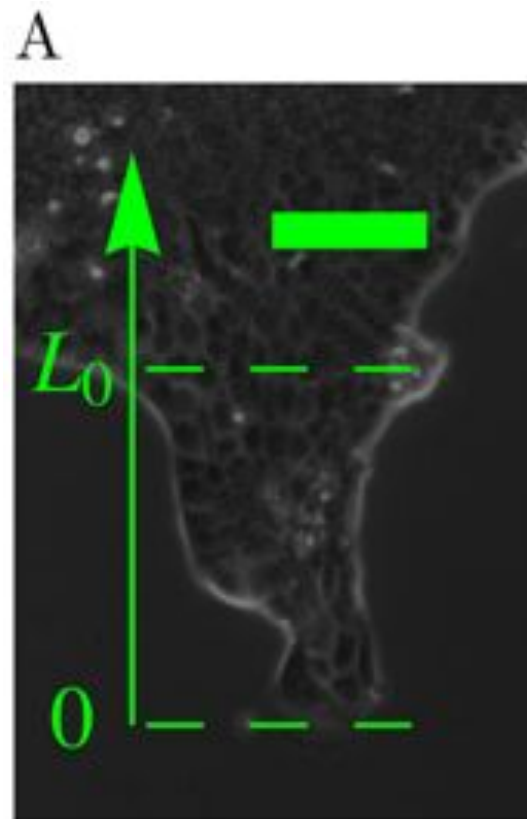


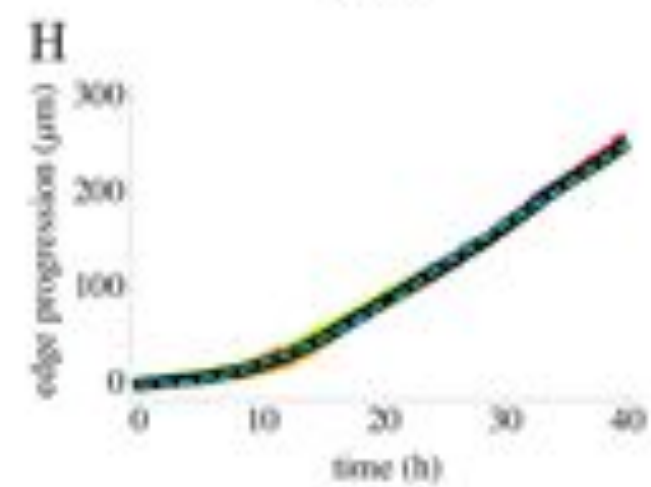
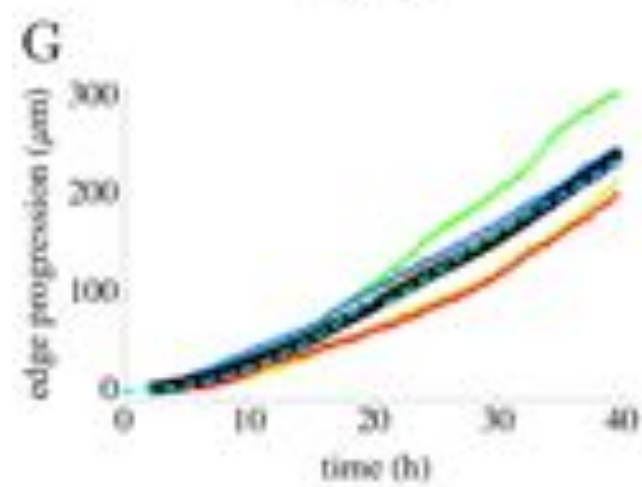
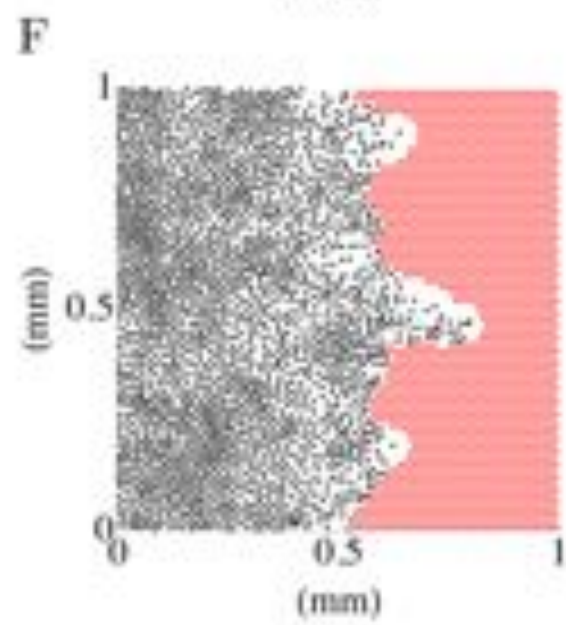
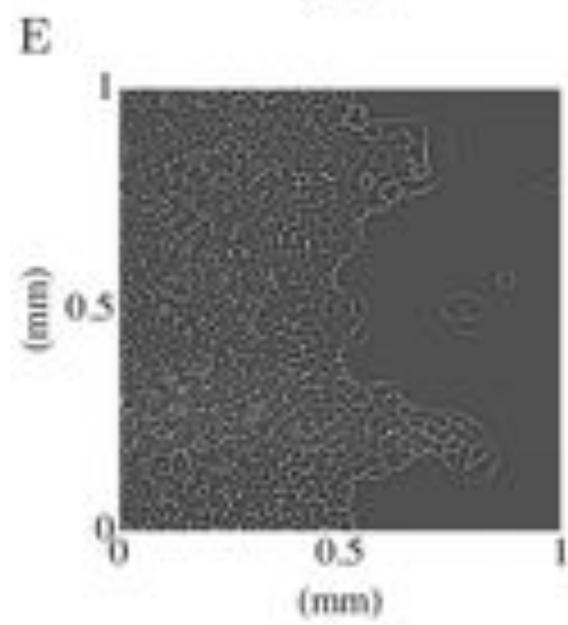
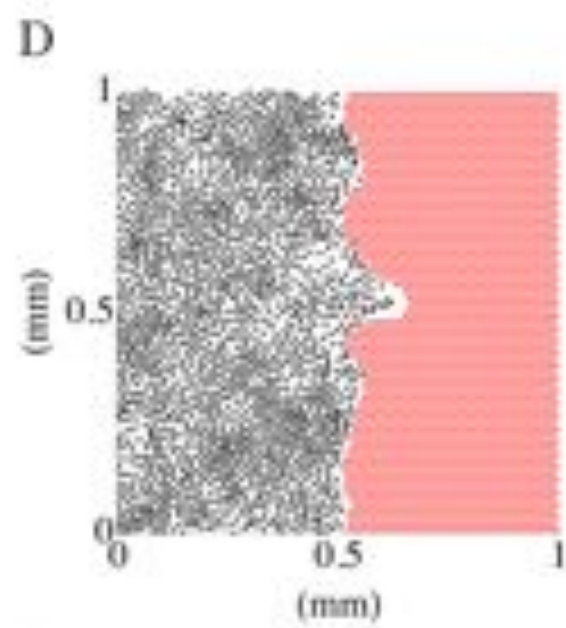
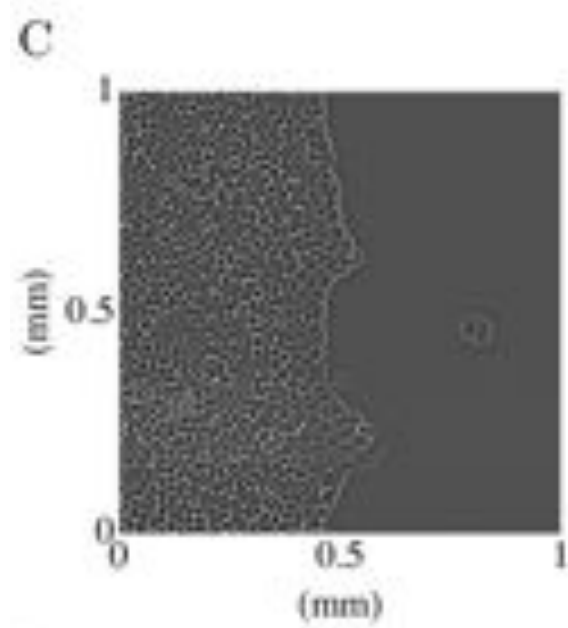
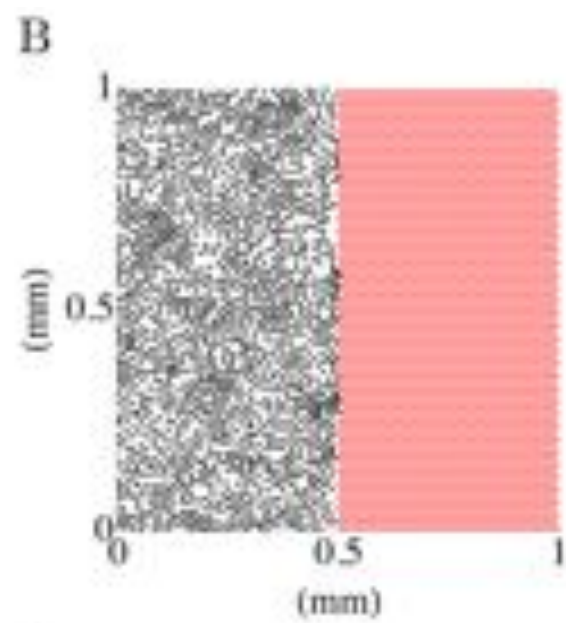
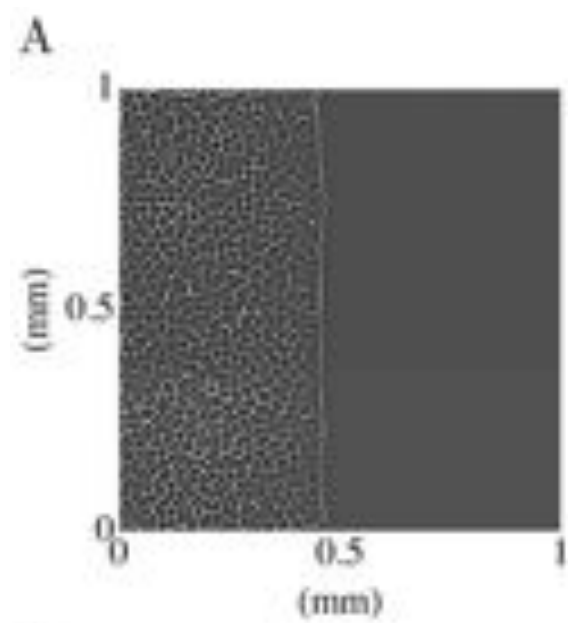
B

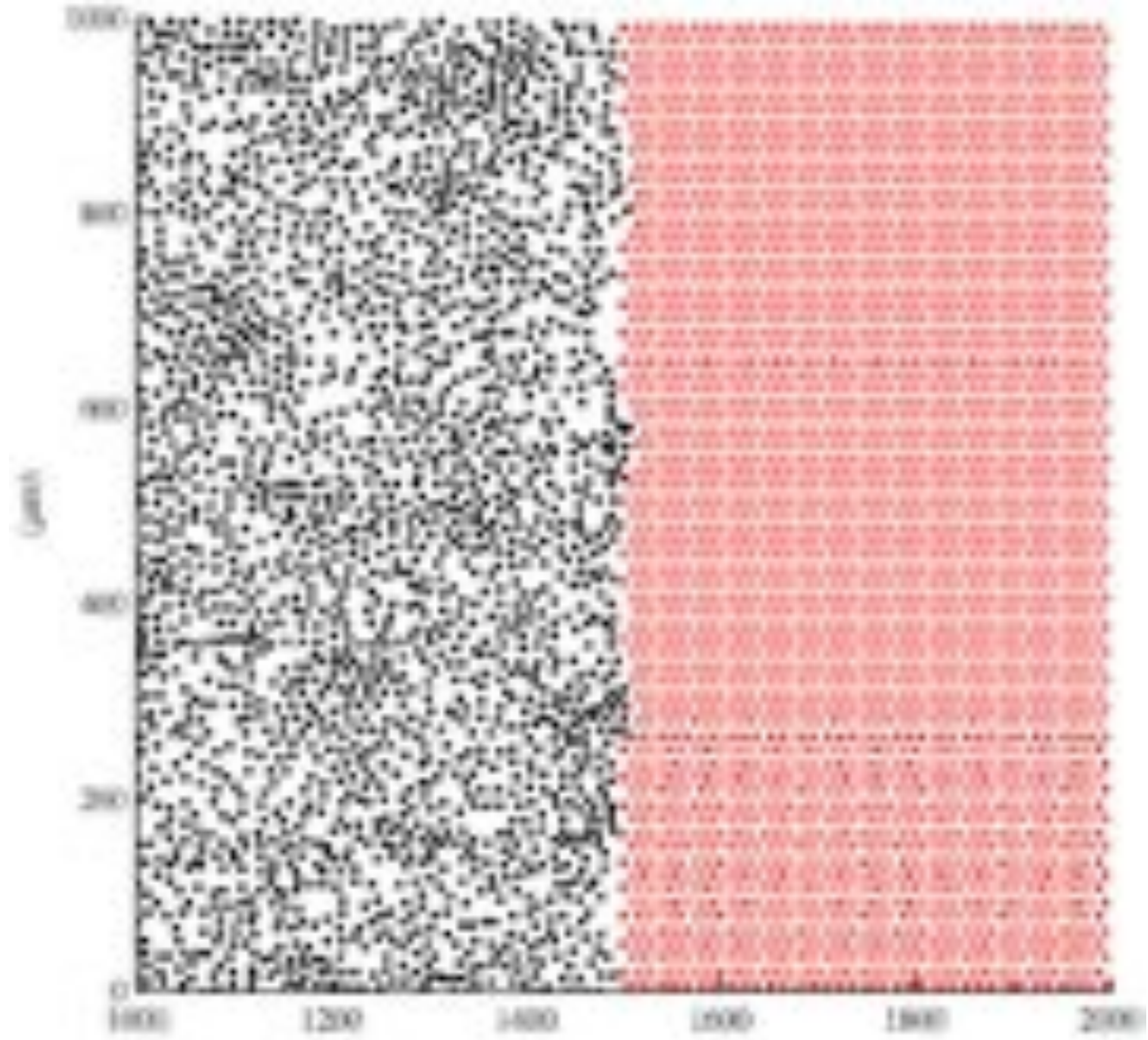




Modelo de células líder







Perspectivas

- Descripción de movimientos colectivos en el pez annual.
- Descripción de movimientos colectivos en el pez zebra.

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