

## Description of Supplementary movies

Movies show order parameter  $\rho$  (colors) and displacement field  $\mathbf{u}$  (black arrows) for different types of cell movement.

Movie 1. Steady motion (gliding)

Movie 2. Stick-slips

Movie 3. Breezing motion

Movie 4. Bipedal motion

Movie 5. Wandering bipedal motion