

### **3. Time-delay in active response of cells generate biological oscillations**

During the embryonic development, it has been observed the prior to drastic shape changes of the organism, tissues deformations oscillate in a manner that resembles a fluid. One of those examples is the ventral invagination (first large deformation in embryo development) or dorsal closure in Drosophila fly. Strikingly though, inertial terms are negligible in such systems, which are the cause of oscillation in general mechanical systems. During this internship, oscillation will be generated with a chemo-genetic regulatory mechanism, that uses a delay between the mechanical state and the active response of the biological system. the presence of oscillation will be tested to a flat distribution of cells.

### **References**

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