

Supporting Information

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Descriptions of Movies. We show one movie of the ABP system whose ratio between attraction and self-propulsion corresponds to $\xi=1.8$ (panel a) Fig. 3). The time between two frames is 5τ (being τ the time unit).

We also show six movies of the squirmers that correspond to the cases shown in panel c) to h) of Fig. 3. The time between two frames is $1.45 t_0$ (being t_0 the time that a squirmer travels its own size).

Movies are made showing one third of the simulation box in order to observe the dynamics of the systems in a more detailed way.

ξ	β	File name
1.8	N/A	xi_1.8ABP.avi
1.0	0.5	xi_1_0_bp0_5.avi
1.0	-0.5	xi_1_0_bn0_5.avi
5.0	0.5	xi_5_bp0_5.avi
5.0	-0.5	xi_5_bn0_5.avi
∞	0.5	xi_infty_bp0_5.avi
∞	-0.5	xi_infty_bn0_5.avi