Dynamics of an isolated valve

(c) Next runs q_inf for P_bound

Measuring the flux at dynamic equilibrium *q_inf* for fixed pressure at the boundaries could give us information about the effective permeability of a valve.

Measuring *at which distance from the valve q_inf for a P_bound* (resp. dP_inf for Q_bound) *is maintained consistently* could also give us information on somekind of effective width of the valve, or interaction distances.

Interactions between 2 valves

We would like to measure at which distance 2 valves defined by a given set of parameters start interacting.

As a measure of interaction, we use:
1/ The maximum of the cross-correlation of the pressure differential across each barriers
2/ The maximum of the cross correlation of the activity rate (rate of openings per given time bin). This measure is closely related to the one that could be used on real data (*cf Frank et al., 2016*)

We also measure the lag corresponding to the maximum of cross-correlation. Ideally, this could be linked to a delay between both active patches.