

Module	Without diffusion	With diffusible element
Coherent Feedforward	Qualitatively similar to input signal	Qualitatively similar to the input signal with weaker spatial variation.
Incoherent Feedforward	If inhibitor is stronger, qualitatively opposite response; if weaker qualitatively similar response to input. Switch in qualitative nature of spatial response as mean of value of gradient signal increased.	Gradient information conveyed through the non-diffusible pathway regardless of stronger pathway. No switch in nature of spatial response.
Positive Feedback	Increasing the feedback constant increases the concentration of the response everywhere in space.	Diffusion of feedback element weakens spatial variation.
Negative Feedback	Increasing the feedback strength causes a decrease in response at all spatial locations.	Diffusion of feedback element strengthens spatial contrast.
Cyclic	All species exhibit gradient profiles	If the directly regulated species is highly diffusible all other species show graded response with greater spatial variation. If any one of the other species is highly diffusible then the directly regulated species exhibits a graded profile while all others exhibit flat spatial profile.
Monostable Switch	Spatial switch-like property observed	May 'enhance' the spatial switching effect
Bistable Switch	Spatial switch-like property exhibited if signal value crosses threshold in some parts of the domain. Effects mirrored with weak diffusion (if signal is completely in the bistable regime in the domain then switching exhibited only for certain initial conditions and sufficiently strong heterogeneity).	System does not exhibit spatial switching behaviour.
Negative Feedback Oscillator	Irregular spatial and regular temporal oscillations observed where signal is in the oscillatory range. If weak diffusion, smooth spatial profile observed in part of the domain in the oscillatory region.	If average value of signal is sufficiently high, temporal oscillations observed in entire domain along with a heterogeneous spatial profile.
Transcritical Bifurcation	Switch-like behaviour is observed in the spatial profile.	Spatial switch-like behaviour is absent.