

## 1 Gaffmonk

- Schnakenberg (LI) model considered
- Sensitivity of final pattern to ICs
- Times to onset of patterning increases drastically as delay is increased.
- Delay on O(minutes) leads to increase in TTP on O(hours)
- (Example of embryonic development)
- Time delays cannot be neglected in general, when considering patterning events which occur on a fast timescale.
- No oscillations found (only delay in activator term)

## 2 LeeGaffney

- GM model (LI, RLB) models considered
- Linear theory does not predict presence of oscillations. Linear theory unreliable in presence of time delays
- Patterning fails to exist for large enough time delay (LI)
- Small lags cause unreasonably large time to pattern (LI)
- Oscillations occur with time delay (RLB)
- Results more likely to be generic, as different models considered.
- Model selection where delay is present must be carefully considered.
- Turing models do reproduce biological phenomena that can be otherwise difficult to explain, yet the results are sensitive to gene expression dynamics.
- Exploration of a stabilising mechanism ?

### 3 Jiang

- Schnakenberg RLB model considered
- Linear analysis, dynamical systems theory
- Time delay can cause inhomogeneous periodic solutions (oscillations)
- Can cause de-stabilisation of spatially inhomogeneous steady states.

### 4 LeeGaffneyMonk

- GM model (LI, RLB)
- ‘Linear theory also significantly underestimates the timescales of the patterning lag in the presense of LI’
- Introduction of delay increases on sensitivity of final patterns
- Temporal oscillations observed in RLB
- Temporal oscillations do not occur, but time to patterning sensitive to delay

### 5 YiGaffLi

- Schnakenberg (LI, RLB)
- Time delay (LI) antogonises pattern formation
- RLB model can cause oscillations and