



The inhibitory fields and phyllotaxis: a conceptual framework

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Simple local rules:

I- No initiation at the center

2- No initiation close. to organs

Snow and Snow 1932 Wardlaw, 1949 Reinhardt et al., 2005



Self-organization from inhibitory fields: a physicist view

Drops of ferrofluids in a magnetic field

Growth and signal distribution, growth and identities,

A question of coordination:

Douady and Couder, 1992

Emerging properties: spatial position















hypothesis Jönsson et al PUAS 2006 Smith et al PUAS 2006











Guédon et al., J. Theor. Biol. 2013

























Gene activation is not a simple function of auxin levels

Orthogonality: no correlations

DR5: synthetic auxin-inducible promoter



Sbeau noisemporal information used?







Perspectives: going back to models

- Explain auxin distribution?
 How do we compare formal models to the
- Mhat is the relative contribution of
- transport vs growth?



