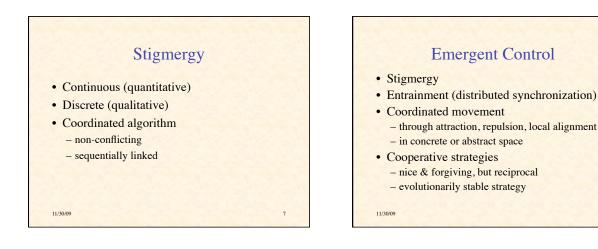


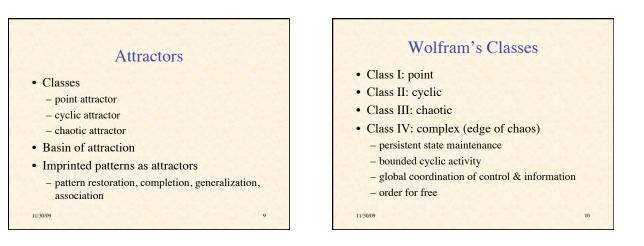
Pattern Formation

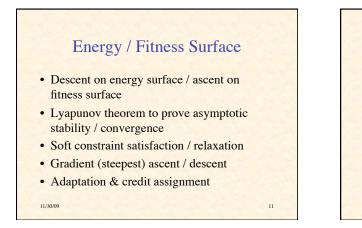
• Excitable media

11/30/09

- Amplification of random fluctuations
- · Symmetry breaking
- Specific difference vs. generic identity
- Automatically adaptive







Biased Randomness

- Exploration vs. exploitation
- Blind variation & selective retention
- Innovation vs. incremental improvement
- Pseudo-temperature
- Diffusion

11/30/09

· Mixed strategies

12

Natural Computation

13

- Tolerance to noise, error, faults, damage
- Generality of response
- Flexible response to novelty
- Adaptability
- Real-time response
- Optimality is secondary

11/30/09

