



Synchronization  
of Chaotic  
Systems

David Ebert  
and Mikaela  
Jordan

# Synchronization of Chaotic Systems

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# Aggregation

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## Definition:

Grouping coupled objects (typically animals)

## Examples:

- Flocks of birds
- Herds of animals
- Schools of fish
- Swarms of insects

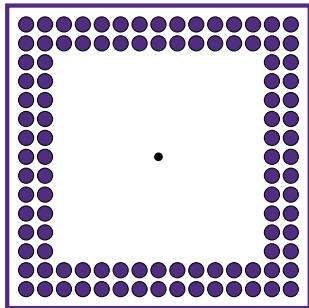


# Human Swarming Version I

## Synchronization of Chaotic Systems

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- The Setup:
- The Rules:
  - **Walk** slowly toward center of the group.
  - **Slow down** if you're within two feet of another person.
  - **Stop** if you are within one foot of another person.



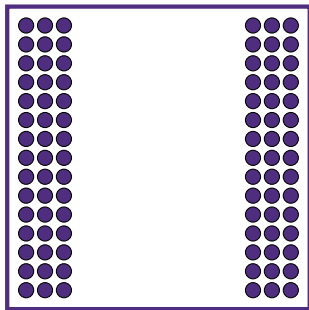


# Human Swarming Version II

Synchronization  
of Chaotic  
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- The Setup:
- The Rules:
  - **Walk** at a slow, constant speed.
  - **Walk** toward the person or people you see in front of you.
  - **Turn right** if you are going to collide.





# Next Steps

Synchronization  
of Chaotic  
Systems

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- Create a better model for Human Swarming I
- Create a model for Human Swarming II
- Do more research on forces between animal swarms/aggregations