

SIMULATION IN SIMULINK

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Odum Institute for Research in Social Science

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WELCOME!

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(comments/suggestions will be much appreciated)

What will we cover?

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- Examples

WHAT IS SIMULINK?

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- Combines intuitive graphical-user interface with excellent speed and storage capabilities
- Is free to you!! (or included in tuition; however you want to look at it)

NEW MODEL...FIRST STEPS

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- Libraries contain building blocks

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Blocks have input and output terminals indicated by wedges pointing towards and away from the block respectively. Lines transmit signals from input to output.

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- Drag Scope into the model, connect all

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- The scope box

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- 5 Now click on **Simulation, Start**

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- 5 Returns a matlab structure...run the sim and lets take a look

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- 5 Connect to the line between the signal and the function..run the simulation

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- 5 Somewhat inconvenient, every time you want a new position on the path, you need a new file.

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- 4 We could use the inputs/outputs of previous simulations as inputs to the current simulation

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- 7 Notice anything odd?...extrapolation

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- 4 Connect the input and output to the two `mux` input wedges
- 5 Run the simulation and observe

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- 7 Which is which? We need a legend.

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- 3 Double Click Scope

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- 3 Double Click Scope
- 4 Right click on the scope and choose Edit Signal Connections

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- 5 Select the inputs and outputs then close.

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- 6 Run the simulation and double click on the glasses

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- 7 Now right click on the plot space and select legend to get a legend