IMaGES
Independent Multiple-sample Greedy Equivalence Search

What is it?

- graph analysis tool
- designed for fMRI data
- models effective connectivity of ROIs
- based on Bayesian algorithms
- java GUI
- developed in collaboration with CMU
Where to get it

http://www.phil.cmu.edu/tetrad/

Click here for access

Click to launch java GUI
Autism Models

- Face Processing
- TOM (Theory of Mind)
- Action Understanding
Task Stimuli

1. Arrow-Object (AO)
2. Eyes-Object (EO)
3. Eyes-LeftRight (ELR)
4. Eyes-OpenClosed (EOC)
5. Mouth-OpenClosed (MOC)

joint attention

controls
Paradigm
GLM Analysis

<table>
<thead>
<tr>
<th></th>
<th>EO-AO</th>
<th>EO-ELR</th>
<th>ELR-EOC</th>
<th>EOC-MOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>FACE</td>
<td><img src="image1.png" alt="Image" /></td>
<td><img src="image2.png" alt="Image" /></td>
<td><img src="image3.png" alt="Image" /></td>
<td><img src="image4.png" alt="Image" /></td>
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<tr>
<td>TOM</td>
<td><img src="image5.png" alt="Image" /></td>
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<td><img src="image7.png" alt="Image" /></td>
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<tr>
<td>ACTION</td>
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<td><img src="image12.png" alt="Image" /></td>
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Time Series Extraction
Model with IMaGES

sub 1

sub 2

...
IMaGES - data input
IMaGES – search
IMaGES – find DAGs
IMaGES - set graph
IMaGES – parametric model
IMaGES - model estimates
IMaGES – Action Network
IMaGES – TOM network
IMaGES – Face network
IMaGES - Task by Network

<table>
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<tr>
<th>Task</th>
<th>ASD</th>
<th>NT</th>
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<tr>
<td>FACE</td>
<td><img src="image1" alt="Network Diagram" /></td>
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IMaGES – Other Studies


