

# EcologicalNetwork.jl

Analysis of ecological interactions

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$$X =$$

$$\begin{bmatrix} .1 \\ .5 \\ .9 \\ .7 \\ .25 \\ .95 \end{bmatrix} \rightarrow \begin{bmatrix} 0 \\ .2 \\ .8 \\ .8 \\ 0 \\ .8 \end{bmatrix}$$

$$(K=6)$$

$$S=26$$

## The EcologicalNetwork package

---

```
using EcologicalNetwork  
data = ollerton();
```

```
η(data)
```

```
3-element Array{Float64,1}:
```

```
0.640955
```

```
0.646288
```

```
0.635621
```

## Visualising networks

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$$\begin{bmatrix} .1 \\ .5 \\ .9 \\ .7 \\ .25 \\ .95 \end{bmatrix} \rightarrow \begin{bmatrix} 0 \\ .2 \\ .8 \\ .8 \\ 0 \\ .8 \end{bmatrix}$$

$K=6$   $S=26$

## Setting up the environment

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using Plots

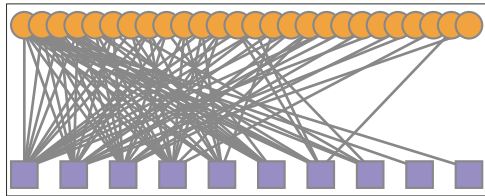
pgfplots()

Plots.PGFPlotsBackend()

## Default plotting

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```
p1 = plot(data, size=(250, 100));  
savefig(p1, "figures/ollerton.tex");
```



## Output



Some code

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$$\begin{bmatrix} .1 \\ .5 \\ .9 \\ .7 \\ .25 \\ .95 \end{bmatrix} \begin{matrix} \rightarrow \\ \rightarrow \\ \rightarrow \\ \rightarrow \\ \rightarrow \\ \rightarrow \end{matrix} \begin{bmatrix} 0 \\ .2 \\ .8 \\ .8 \\ 0 \\ .8 \end{bmatrix}$$

$K=6$   $S=96$

## Default plotting

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