

# Stochasticity and Evolution in Food Webs

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# species ARE related

| Evolution              | Ecology               |
|------------------------|-----------------------|
| ONE phylogeny<br>image | ONE food web<br>image |

# Evolution in/of Ecology

Evolution shaped the stochastic backbones of Food Webs  
image

# Food Webs embedded

## Random Dot Product Graphs

image

## Phylogenetic vs. Observed traits

$$\text{vcv}(\hat{X} | \text{evolutionary model}) \text{ vs. } \text{vcv}(X)$$

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- ▶ Fine wirings may be deceiving
- ▶ Evolutionary model is inadequate

# (Not a) Conclusion

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- ▶ Spoiler 2: An ecological informed model of species evolution maybe it's (almost) there.

# Thanks!

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By the way, I'm looking for a postdoc.