Stochasticity and Evolution in Food Webs

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+————+————+ | Test | Test 2 |
+========+========+ | Test 4 | Test 5 |
+————+————+
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ONE tree of life	ONE network of interactions
phylogeny	Food Web
image	image

Evolution shaped the stochastic backbones of Food Webs

image

Food Webs embedded

Random Dot Product Graphs

image

Phylogenetic vs. Observed traits

vcv(X_e|evolutionary model) $\sim$ vcv(X)

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- Evolutionary model is inadequate

- Spoiler 1: Evolutionary distinctiveness vs. Web Centrality

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

Thanks!

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Daniel B. Stouffer (University of Canterbury)

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Mike Steel; Carey Priebe; A. Mooers', D.B. Stouffer's & J. Tylianakis's labs; . . .

P.S. I am looking for a research team where to develop further this picture. Contact me if interested: gvd16@uclive.ac.nz