## Quantization of ecological interactions yields insights into community assembly and dynamics

Justin D. Yeakel, Mathias Pires, James O'Donnell, Marcus de Aguiar, Paulo Guimarães Jr, Dominique Gravel, and Thilo Gross School of Natural Sciences, University of California, Merced, Merced, CA 95340, USA abstract goes here

## Introduction

Amazing words. The best words.

## Results

## Effects of engineers on community richness

Increasing the number of engineers (species with  $m \leftrightarrow n$  interactions with their respective objects) at time t

results in the potential for larger extinction cascades at time t+1, and this correlation increases with the number of engineers in the community. This positive correlation between the number of objects at time t and extinction cascade size at time t+1 results from the increasing interconnectedness that results from the higher number of objects relative to species in the system. Because the existence of a given object is tied to the species that makes them (one or multiple), the effects of primary extinctions are magnified.