



## BETA DIVERSITY OF PLANT-POLLINATOR NETWORKS AND THE SPATIAL TURNOVER OF PAIRWISE INTERACTIONS

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Interactions between species form complex networks that vary across space and time. Even without spatial or temporal constraints mutualistic pairwise interactions may vary, or rewire, across space but this variability is not well understood. Here, we quantify the beta diversity of species and interactions and test factors influencing the probability of turnover of pairwise interactions across seven sites of high diversity rupestrian grasslands (*campos rupestres*) in Serra do Cipó, SE Brazil. We ask: 1) whether beta diversity of plants, pollinators, and interactions follow a similar trend across space, and 2) which interaction properties and site characteristics are related to the probability of turnover of pairwise interactions. Geographical distance was positively correlated with plant and interaction beta diversity. We show that the identity of pairwise interactions is highly variable across space and could be determined largely by local species abundances. However, those pairwise interactions that are locally frequent will also be consistent across space if no temporal or spatial constraints are imposed on the species. These interactions could be of key importance for species in obligate or facultative mutualisms and form consistent elements in otherwise highly variable interaction networks.