



Figure 1: Hierarchical network represented as a meta-ecosystem of patches (red), species (orange), individuals (blue), and genes (black). At intra-organismal level, genes interact to produce a trait (blue). At inter-organismal level individuals mate (dotted pink links) to produce the distribution of traits (blue tones). At population level trait distribution drives the interaction strength between species (brown links). The meta-ecosystem is pictured as a spatial network (black links) of local interaction networks.