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Hierarchical Link Clustering in Complex Networks YONG-YEOL AHN, SUNE LEHMANN, JAMES BAGROW, ALBERT-LÁSZLÓ BARABÁSI, Northeastern University — Identifying modular network structure is generally a problem of finding the correct community membership of each node in a network. An alternative approach, clustering links, naturally accounts for real world characteristics such as strong community overlap, multi-partite structure, and hierarchical organization. By introducing a pair-wise link similarity, we use a hierarchical clustering method to identify relevant communities in real-world examples such as biological networks. Our results reveal previously hidden organization of communities.

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