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Partitioning Links: A New Approach to Communities in Complex Networks JAMES BAGROW, YONG-YEOL AHN, SUNE LEHMANN, ALBERT-LÁSZLÓ BARABÁSI, Northeastern University — We propose a new viewpoint for the problem of community detection in complex networks. Rather than defining a community as a set of densely interconnected nodes, we define a community as a set of (related) links. We show how this alternative viewpoint incorporates significant aspects including overlapping communities. A quantitative framework for evaluating the link partitions is also introduced.

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