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The statistical physics of networks

MARK NEWMAN, University of Michigan

There are networks in every part of our lives: the Internet, the power grid, the road network, networks of friendship or acquaintance, ecological networks, biochemical networks, and many others. As large-scale data on these networks have become available in the last few years, a new science of networks has grown up combining observations and theory and drawing heavily on ideas from physics, to shed light on systems ranging from bacteria to the whole of human society. This talk will give an introduction to this rapidly-growing interdisciplinary branch of science and discuss some of the latest discoveries in the field.