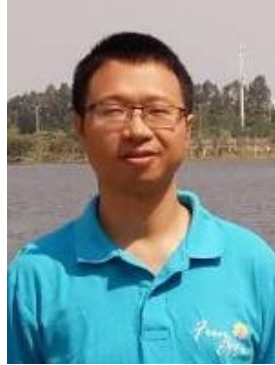




The algorithms on cyclic vertex (edge) connectivity



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Room 416, School of Mathematics, Sun Yat-sen University

This talk will be divided into two main parts. In the first part, we will review some classic algorithms in graph theory. In the second part, some current research on algorithms of cyclic vertex (edge) connectivity will be introduced. The problem of finding a polynomial time algorithm for determining the cyclic vertex (edge) connectivity of a graph has been open for many years. Here, we present some polynomial time algorithms for the cyclic vertex connectivity of regular graphs. We also present a stochastic algorithm for the cyclic edge connectivity, where the graphs satisfy some conditions. In the above two parts, we will mainly focus on introducing the ideas on the algorithms.