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Title: Algorithms and combinatorics: network search and Ramsey theory

Abstract: Computational problems related to searching have long paved the way of Computer Science, both as motivation and a test-bed for new ideas. Similarly, Ramsey theory has provided Combinatorics a number of beautiful problems whose attack has originated many useful and powerful tools, and elegant proofs. We shall discuss some recent developments in either and both areas, namely (time permitting) search of faulty links in networks, to structured graph partitions, Latin squares, and thresholds for Ramsey-type properties of oriented graphs.