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Approximation algorithms for some clustering problems

Clustering problems arise in a wide range of application settings from clustering documents to placing centers in networks. The applications mentioned above give rise to a number of related hard algorithms problems, where the aim is to partition a given set of points into clusters so that the points within a cluster are relatively close with respect to some measure. Approximation algorithms provide a framework to develop algorithms for such problems that provide solutions that are provably close to optimal. In this talk we shall discuss some of the approximation algorithms for these problems.