### Networks and Community Detection

Joshua Mankelow January 18, 2022

#### Abstract

Networks are a great model for analysing and understanding real world complex systems. A very important feature of these network models is community detection. Community detection allows us to identify clusters in the network that are well connected amongst eachother. If a network is being used to model a real world system then, finding this structure has many implications about the behaviour of the system. This essay will discuss multiple methods for community detection in networks and their applications to the analysis of real world complex systems. [Gre93]

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# 1 Something

One.

### 1.1 **TEST**

# 2 Something else

Two.

# 3 Something else part 2

Three.

# 4 Something else part 3

Four.

### References

[Gre93] George D. Greenwade. The Comprehensive Tex Archive Network (CTAN).  $TUGBoat,\ 14(3),\ 1993.$