Community detection (1)

Complessità nei sistemi sociali

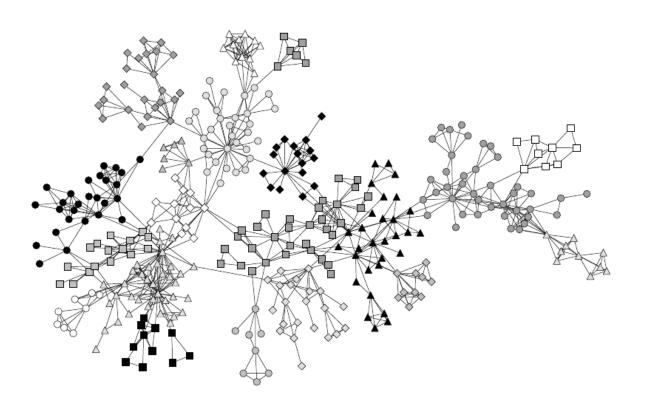
Lorenzo Dall'Amico



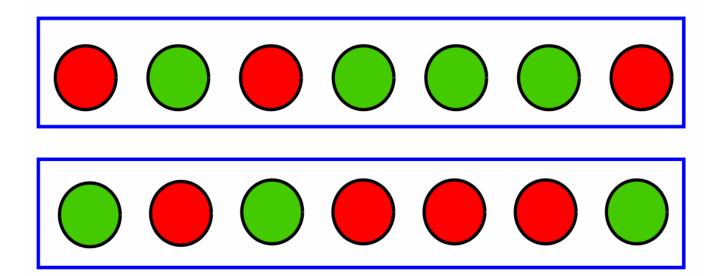
- Email: lorenzo.dallamico@{isi, unito}.it
- Note: lorenzodallamico.github.io/teaching



A graph with communities

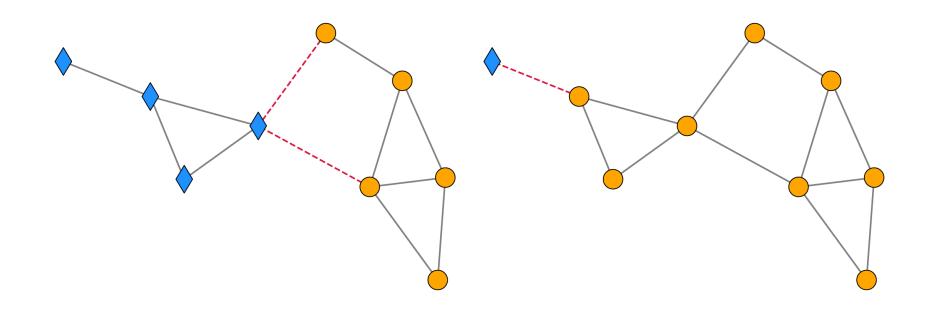


Comparing partitions

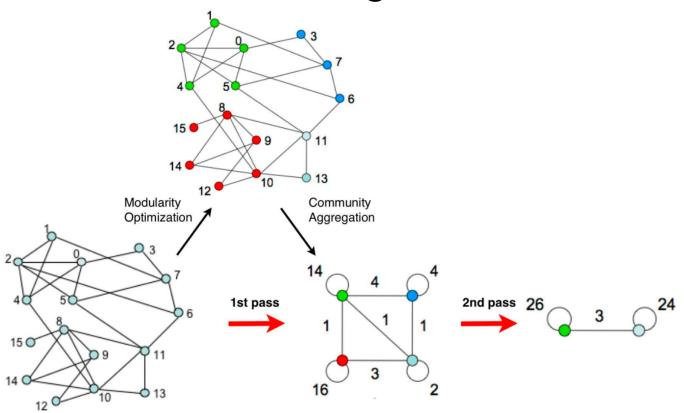


Two different naming strategies of the same partition

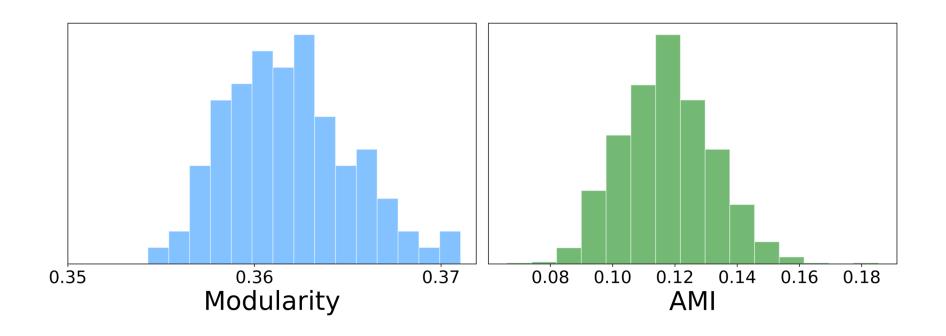
Graph cut evaluation



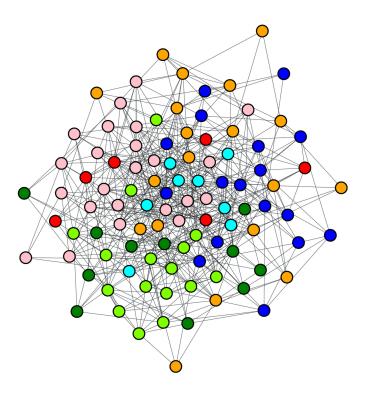
Louvain algorithm



Evaluation of Louvain algorithm



Louvain on ER



A partition in 34 communities of an ER with modularity 0.52

Resolution limit

Maximal modularity partition of a chain of cliques

