

Course project  
"Optimization approaches to community detection"

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**1 Introduction**

**2 Stochastic block model**

**3 Algorithms**

**3.1 Semidefinite relaxations**

**3.2 Conjugate gradients method**

**3.3 Modularity-based methods**

**3.4 Spectral method**

**4 Data**

**5 Experimental results**

**6 References**

- [1] A low-rank approach to the computation of path integrals. M.S. Litsarev, I.V. Oseledets, 2015.
- [2] Karl Sigman notes, 2006.