

*Social networks*

# Network. Vk.



Chudakova Lena

# Network Summary

Node size=8633  
Node order=578  
Diameter=10  
Connected components=39  
Average path length=2.7  
Average degree=14  
Clustering coefficient=0.49  
Node attributes:{first name,  
last name,  
city,  
sex,  
university name,  
faculty name}

## Top nodes



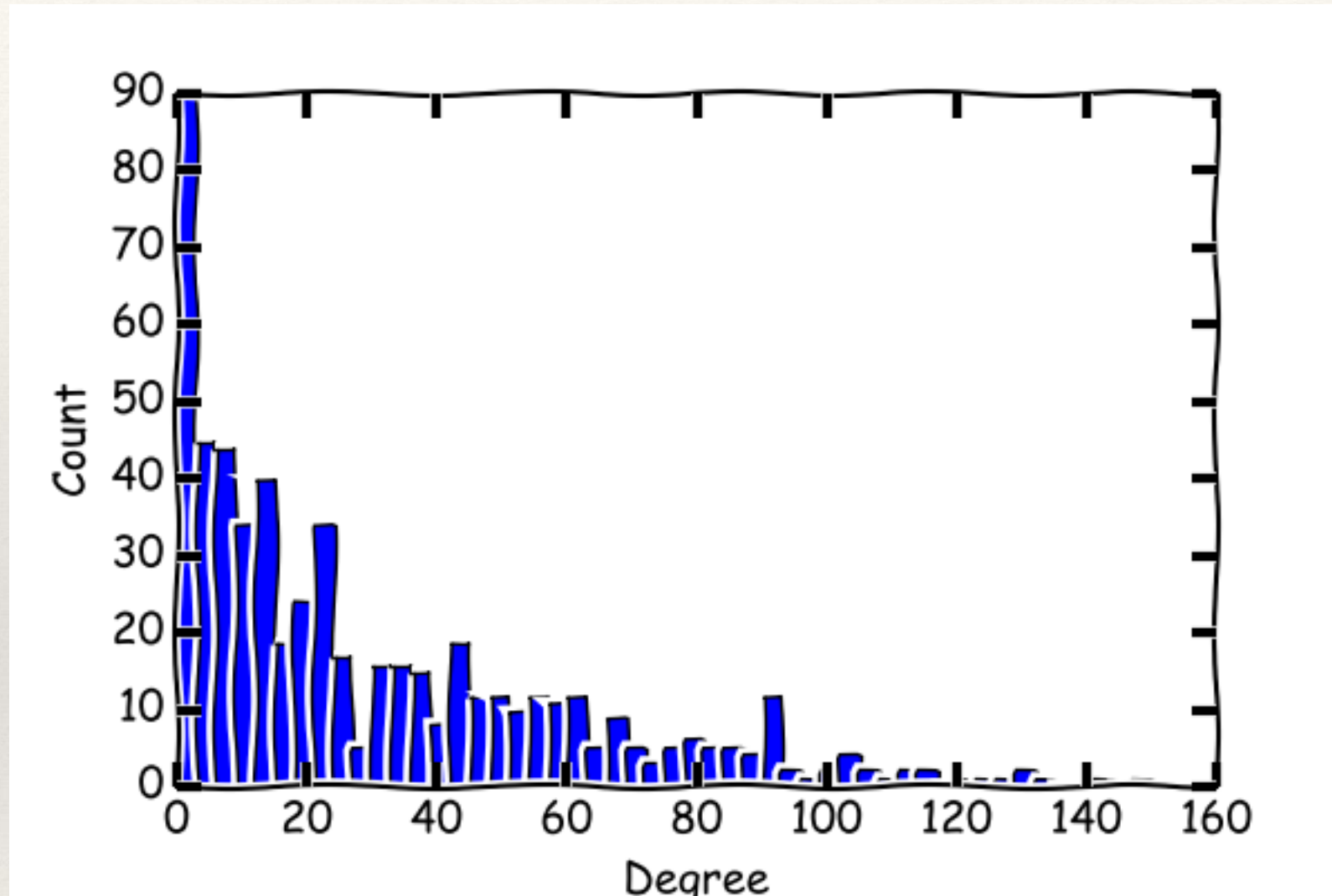
— Friends from school  
|



— School teacher



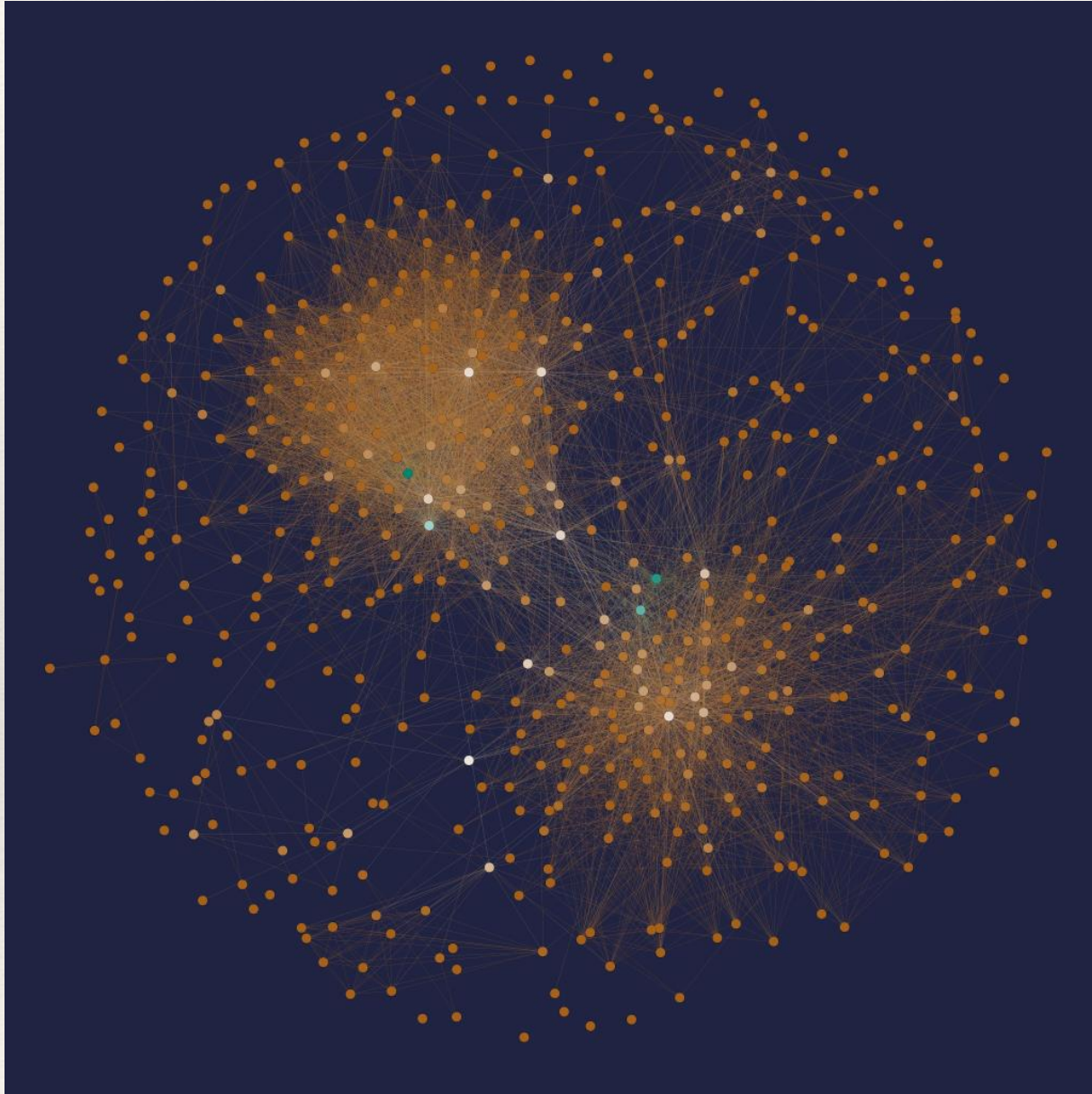
# Degree distribution



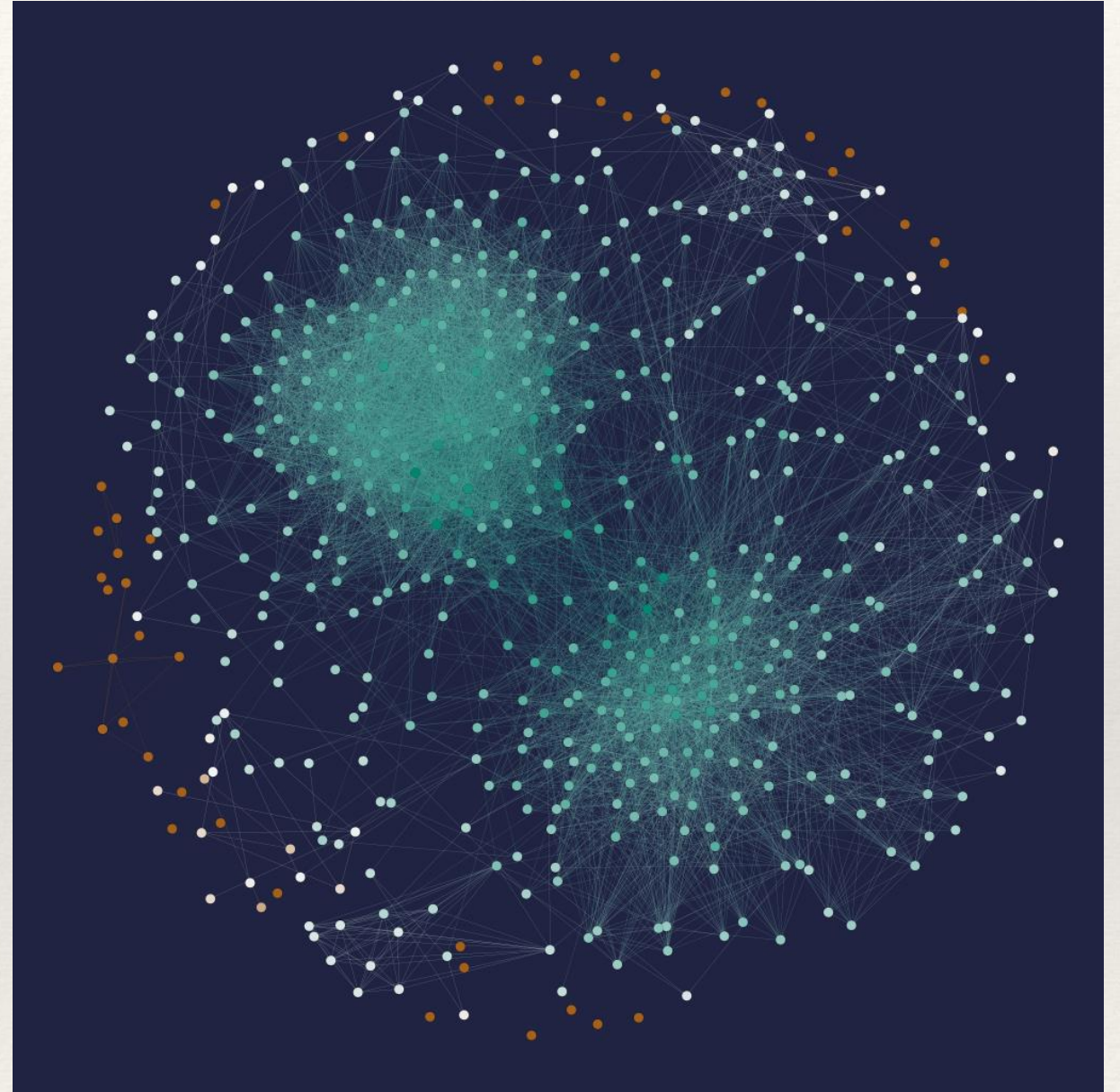
Far from pure power-law, high variance



# Structural analysis



Betweenness centralities



Closeness centralities



---

# Structural analysis

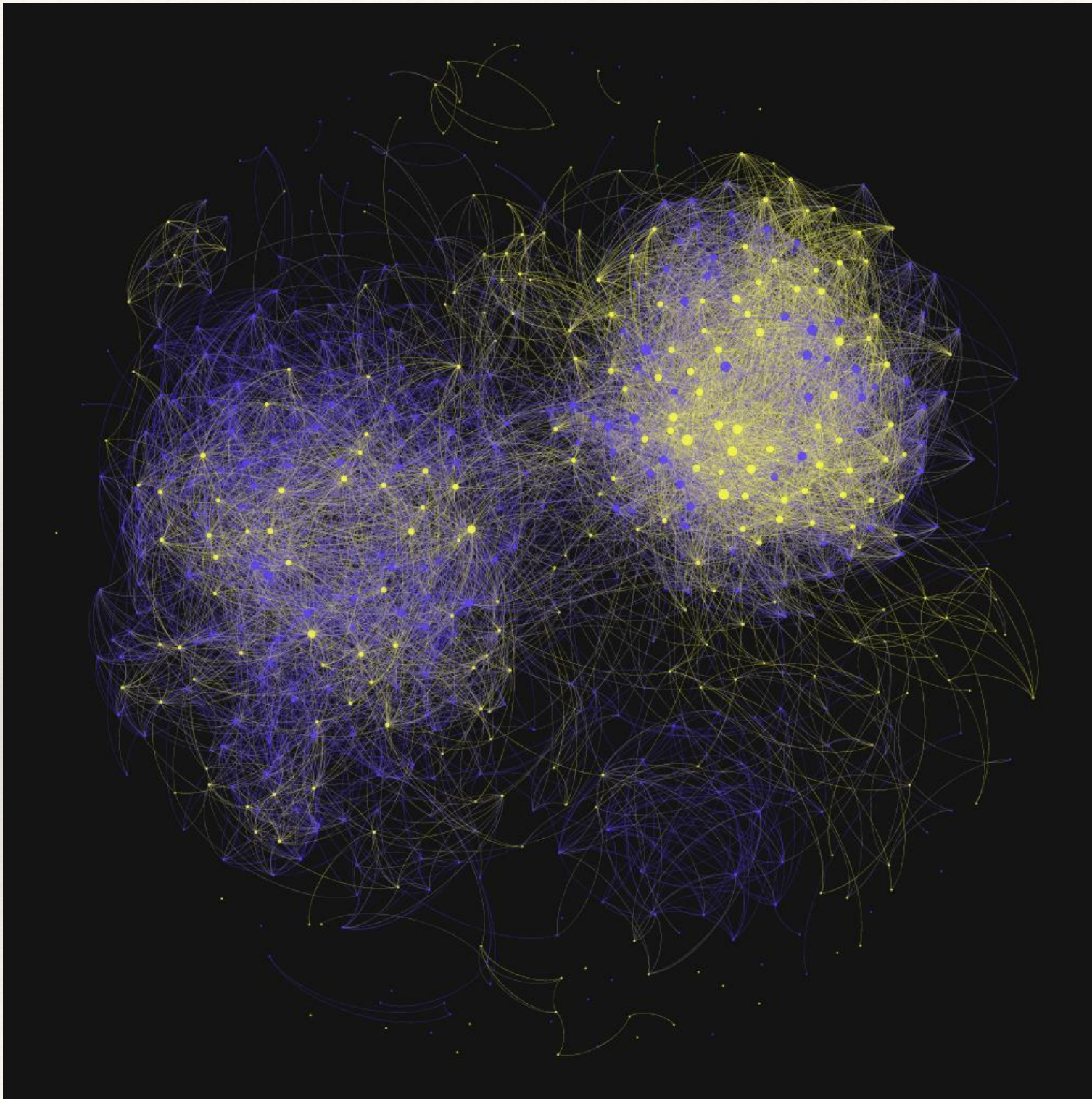
---



Page rank



# Assortativity



‘Sex’

Degree assortativity coef= 0.246

Assortativity coefficients  
for different attributes

‘city’=0.013

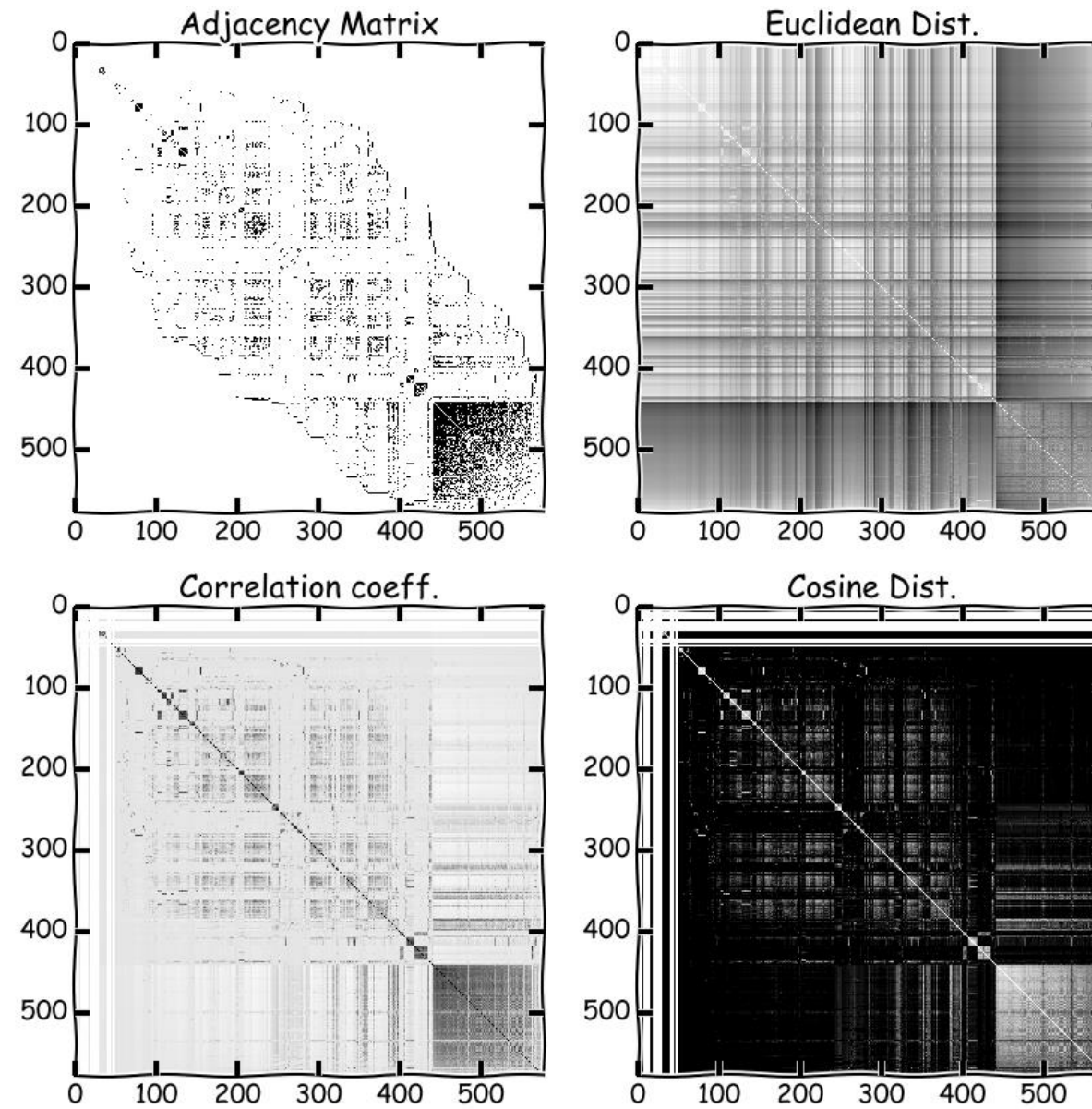
‘university’=0.107

‘faculty’=0.148

‘sex’=0.066

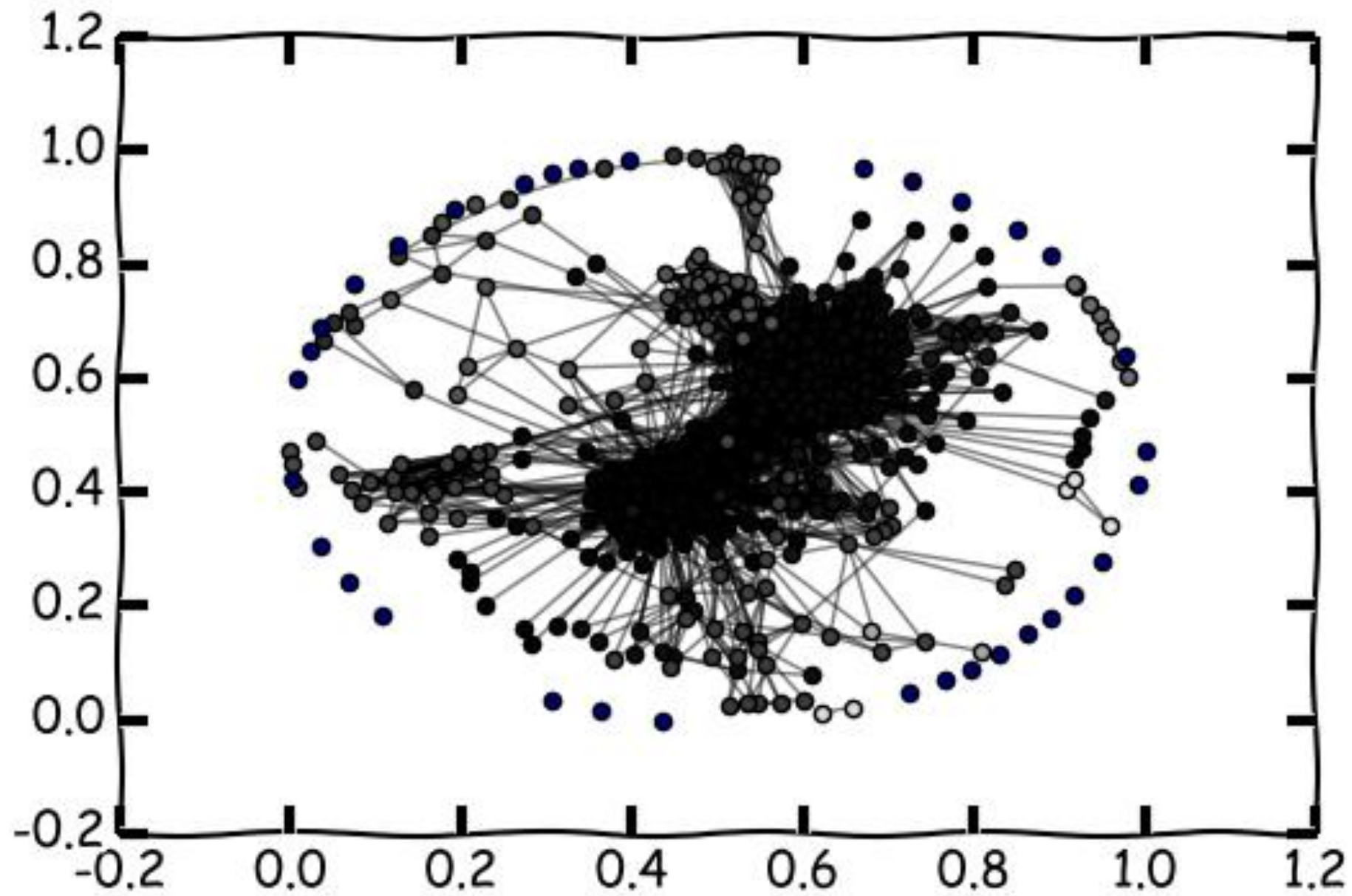


# Node structural similarity





# Community detection



module community