

SIPTA-Community based on Paper Contributions – Descriptive Statistics and Network Analysis

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1. Introduction

This poster explores the electronic proceedings of the ISIPTA conferences from 1999 to 2019.

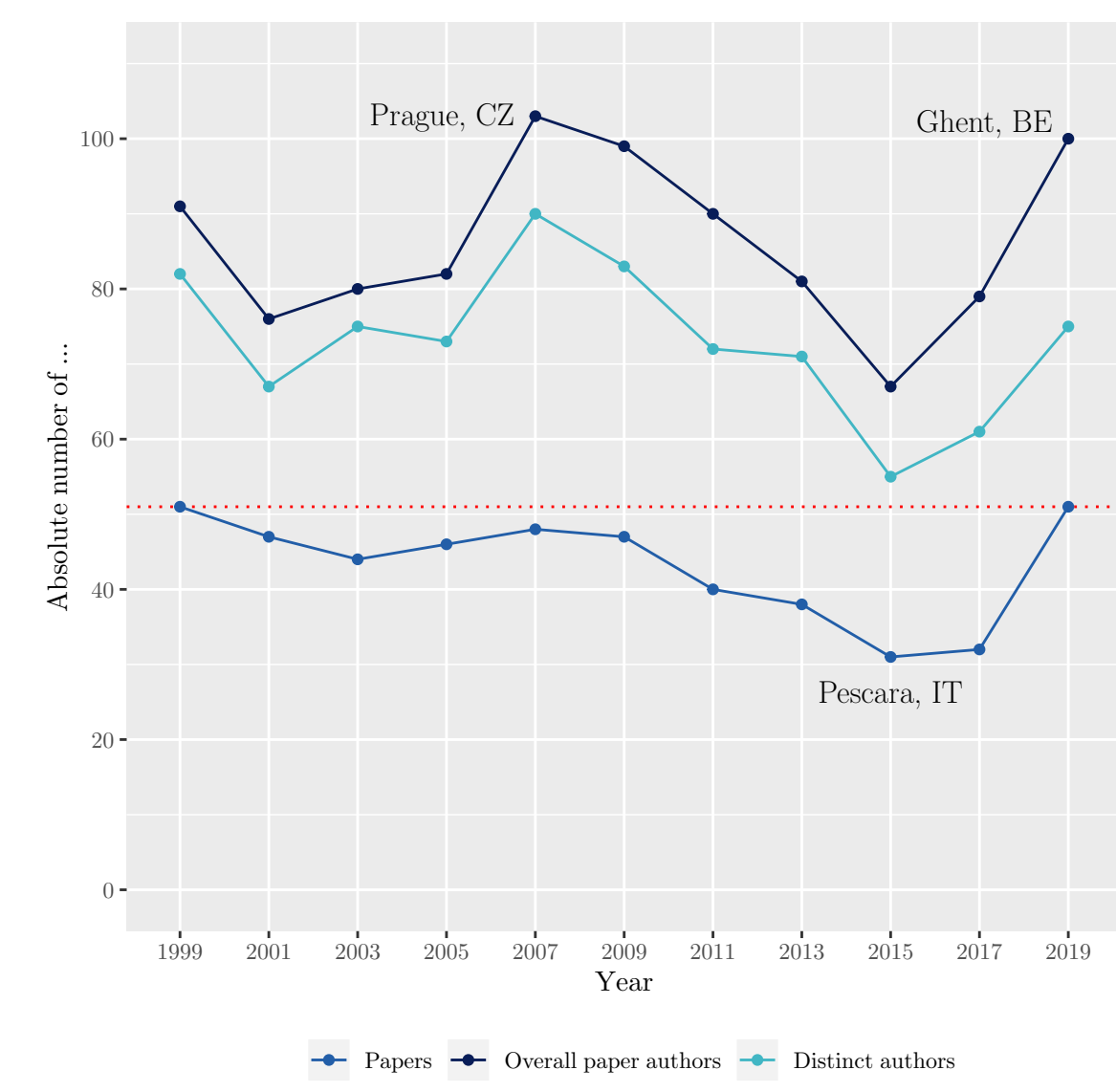
The data were automatically collected from the respective web pages and the bibliography summaries, and afterwards manually checked and cleaned.

This poster is in succession to the posters presented at ISIPTA '11, ISIPTA '15, and ISIPTA '17. The collaboration characteristics are updated and also the links to paper contributors of the first ISIPTA are highlighted.

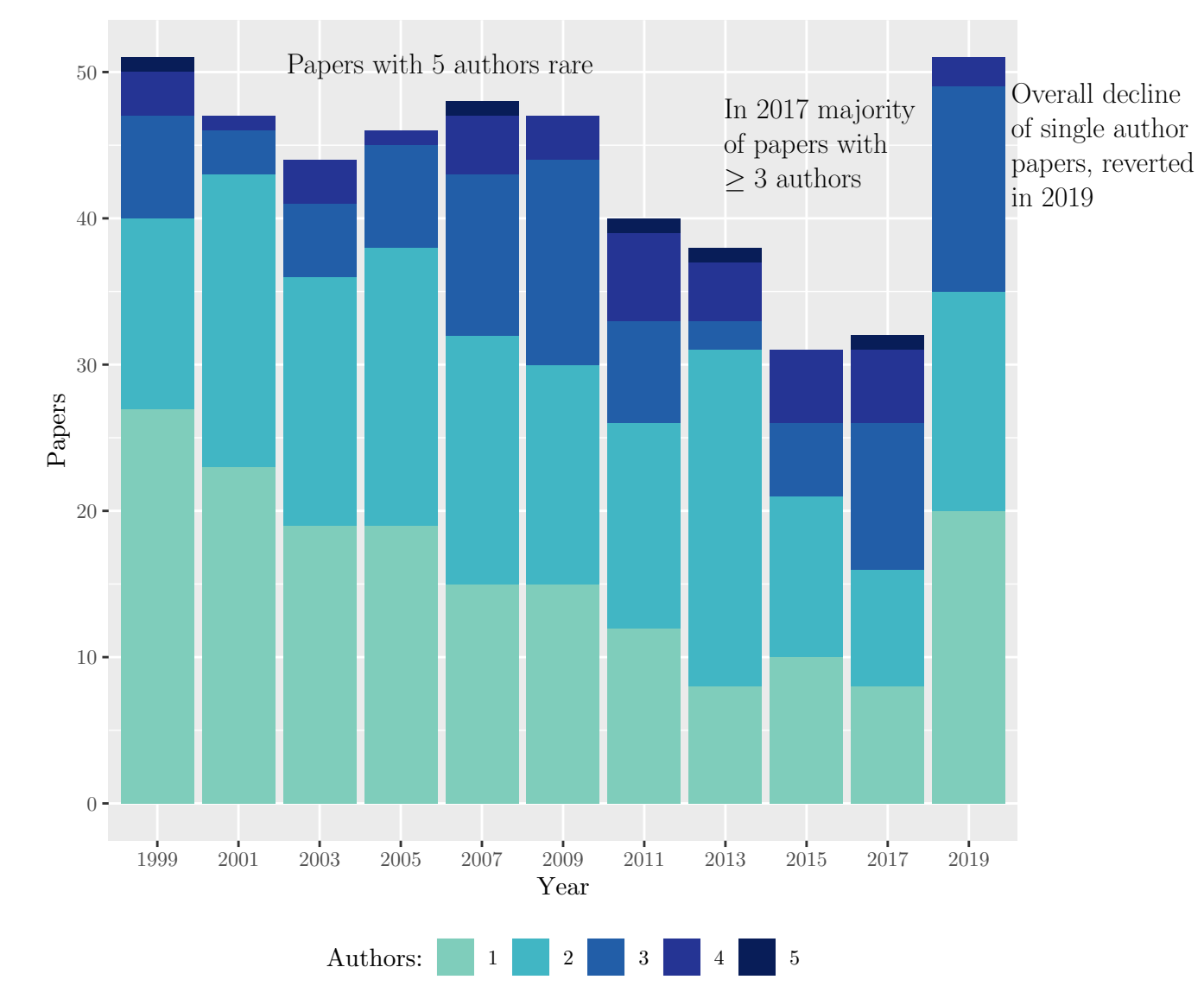
Feel free to mark & comment any interesting aspects in the data!

The development version of the underlying R-package and the code for the graphics is available on GitHub ([paul-fink/ISIPTA](https://github.com/paul-fink/ISIPTA))
Contact: Paul Fink (290); statistics.pf@mailbox.org

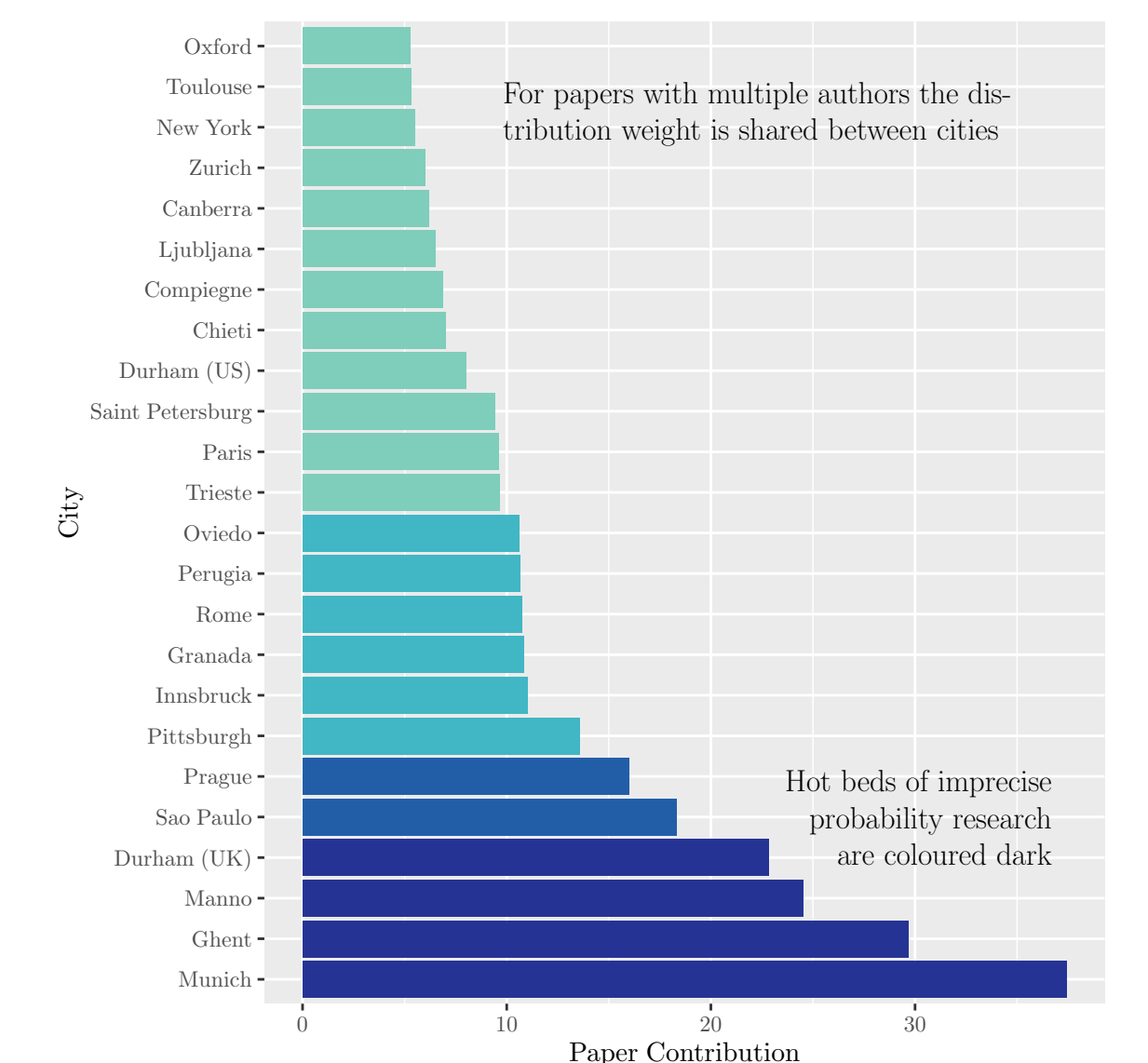
2. Paper and Author Summary



3. Authors per Paper



4. Paper Contribution per City



5. Keywords

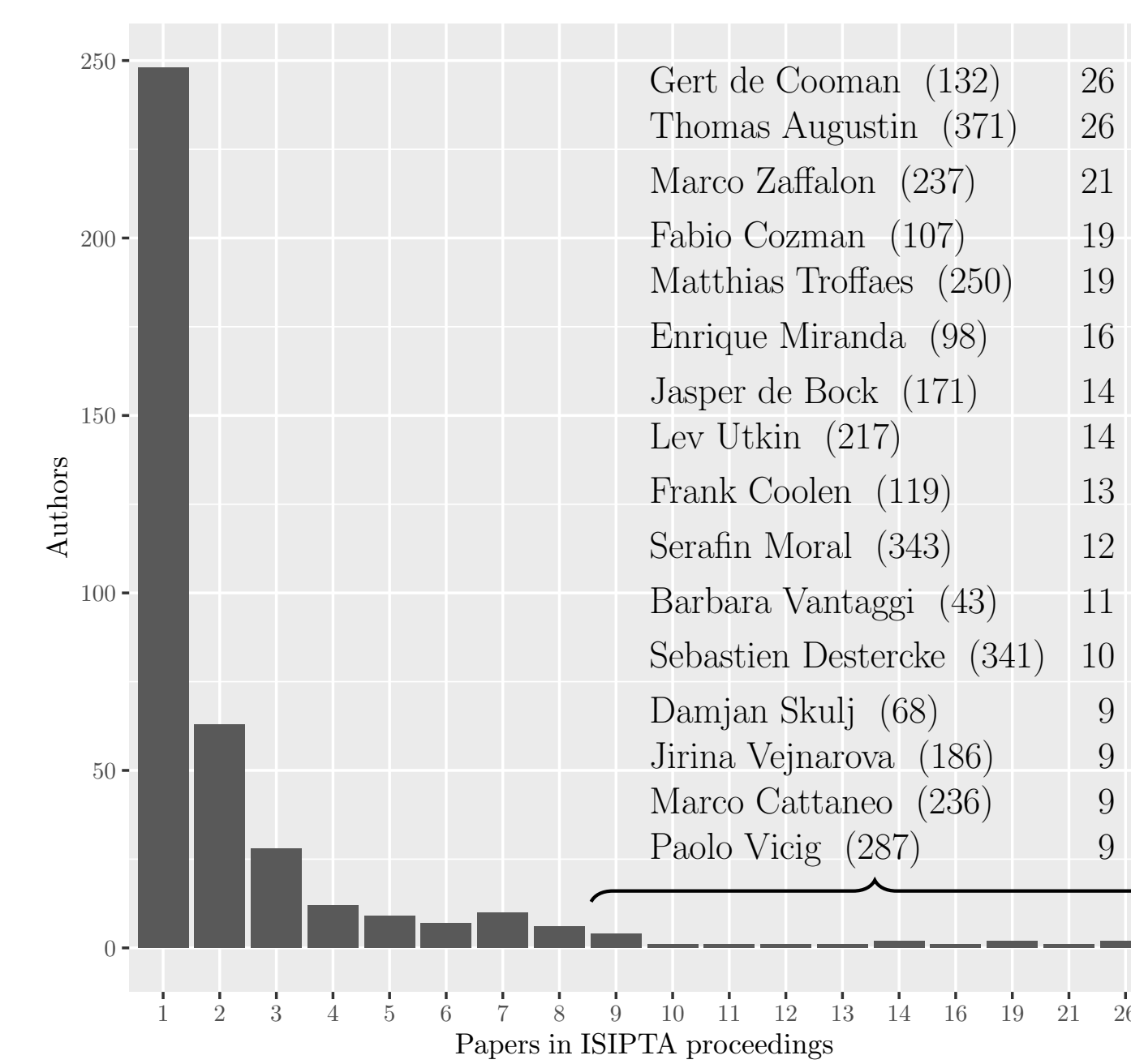


Keywords at ISIPTA 2019

202 distinct keywords
3.96 distinct keywords/paper

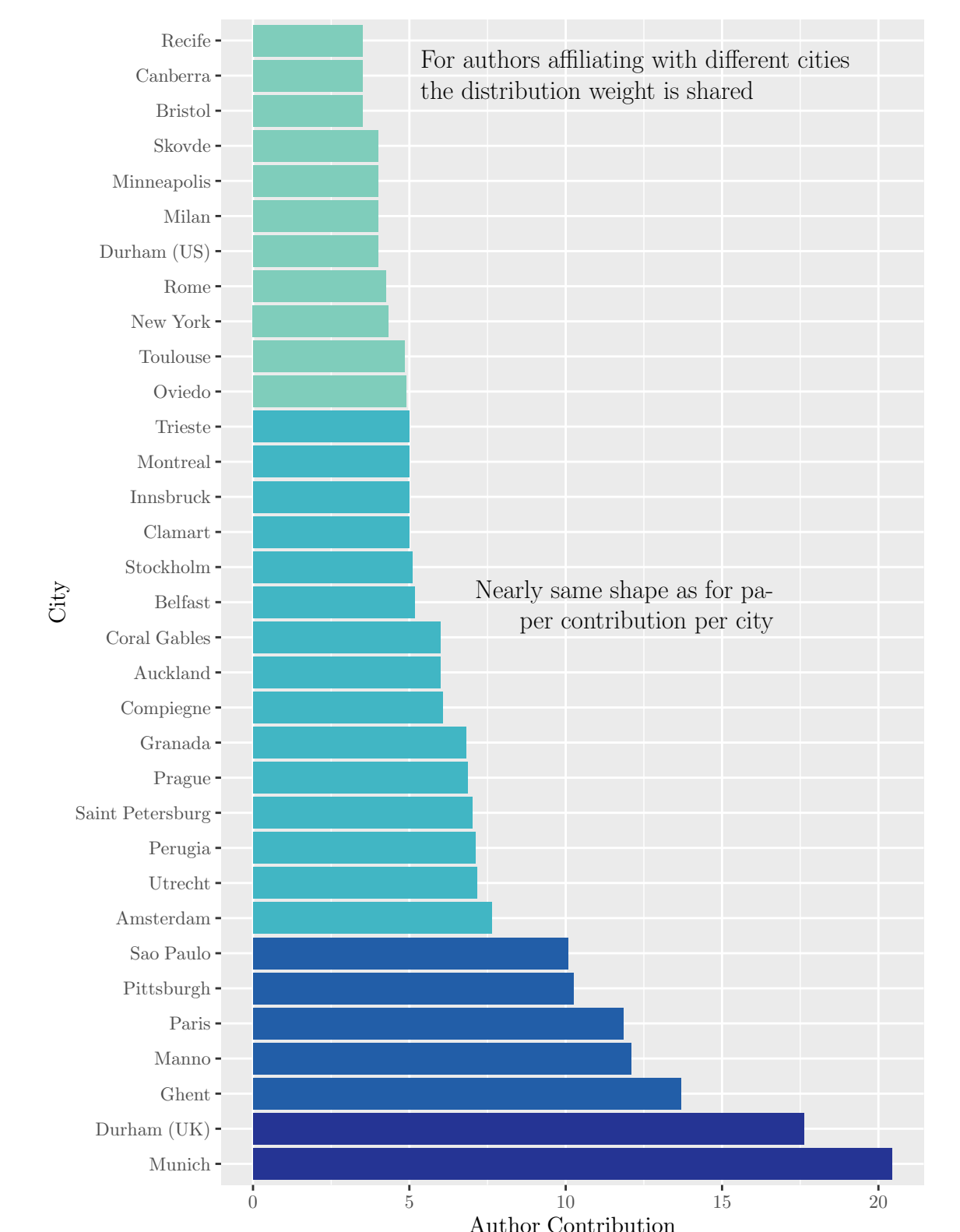
1. imprecise probability 9
2. random set 5
3. classification 4
3. credal set 4
5. belief function 3
5. coherence 3
5. dempster-shafer theory 3
5. epistemic irrelevance 3
5. imprecise markov chain 3
5. robust bayesian 3
5. robustness 3
5. sum-product networks 3

6. Papers per Author

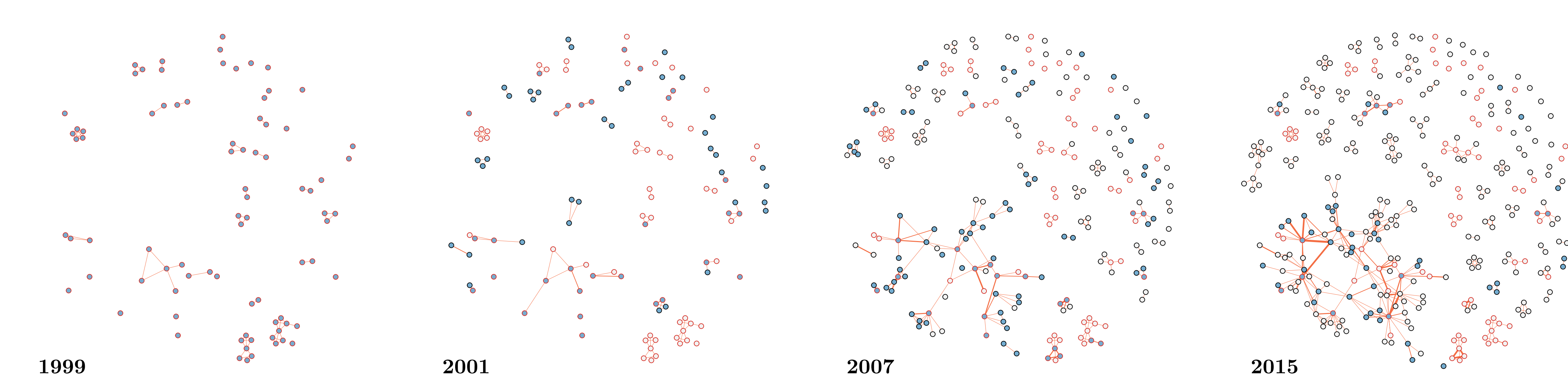


62% of the authors contributed to one paper and another 16% contributed to 2 papers. Tail of the distribution is long and growing.

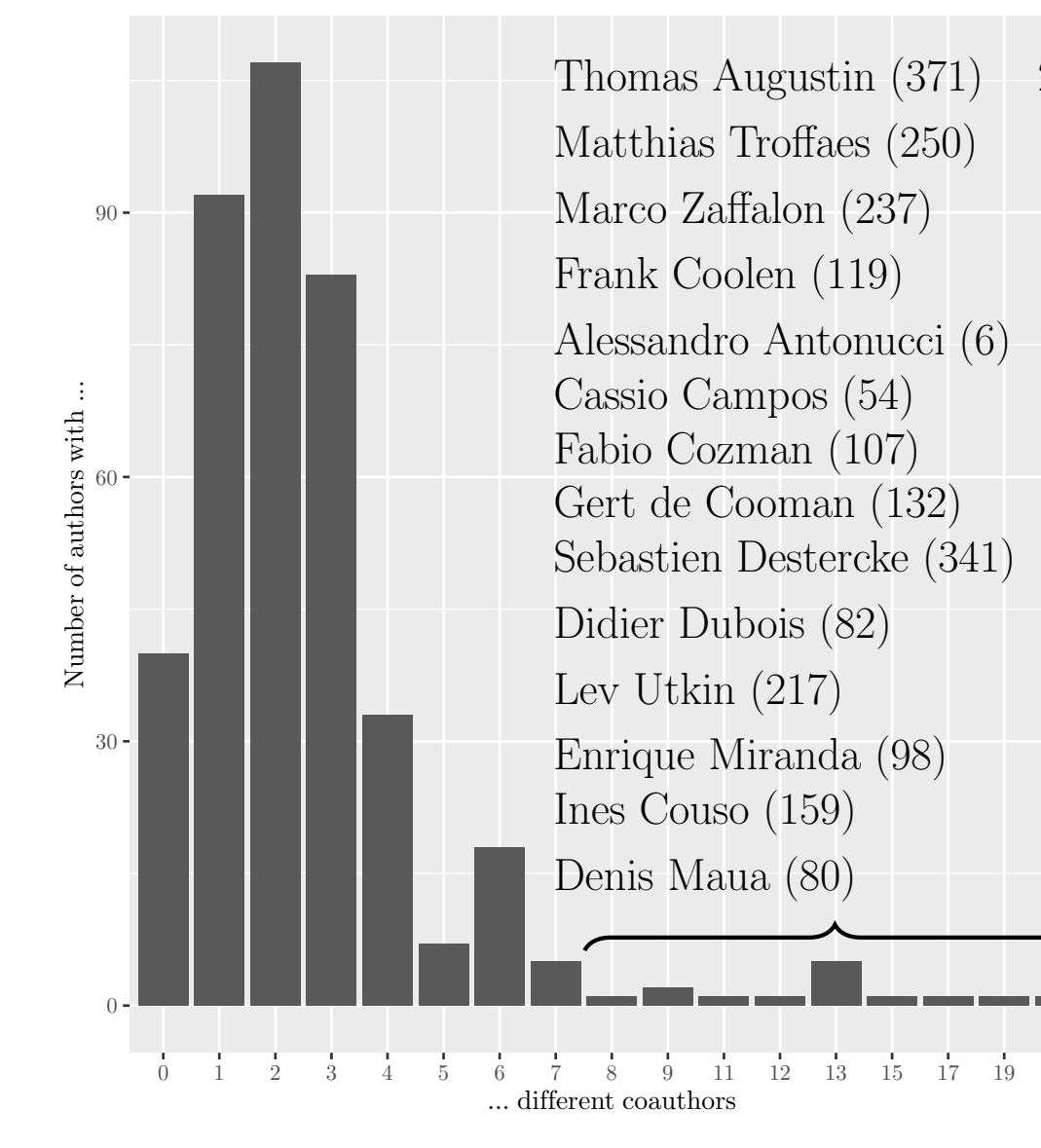
7. Author Contribution per City



8. Coauthor Network (Evolution)



9. Number of Coauthors



Network Statistics

399 vertices; 527 edges; 96 connected components

Largest connected component:

- Covering 37% of all ISIPTA authors
- 2/3 of the core contributors are within

Diameter: 8

Longest shortest path between any connected vertices

Degree of separation: 3.90

Any author is on average < 4 steps away from any other.

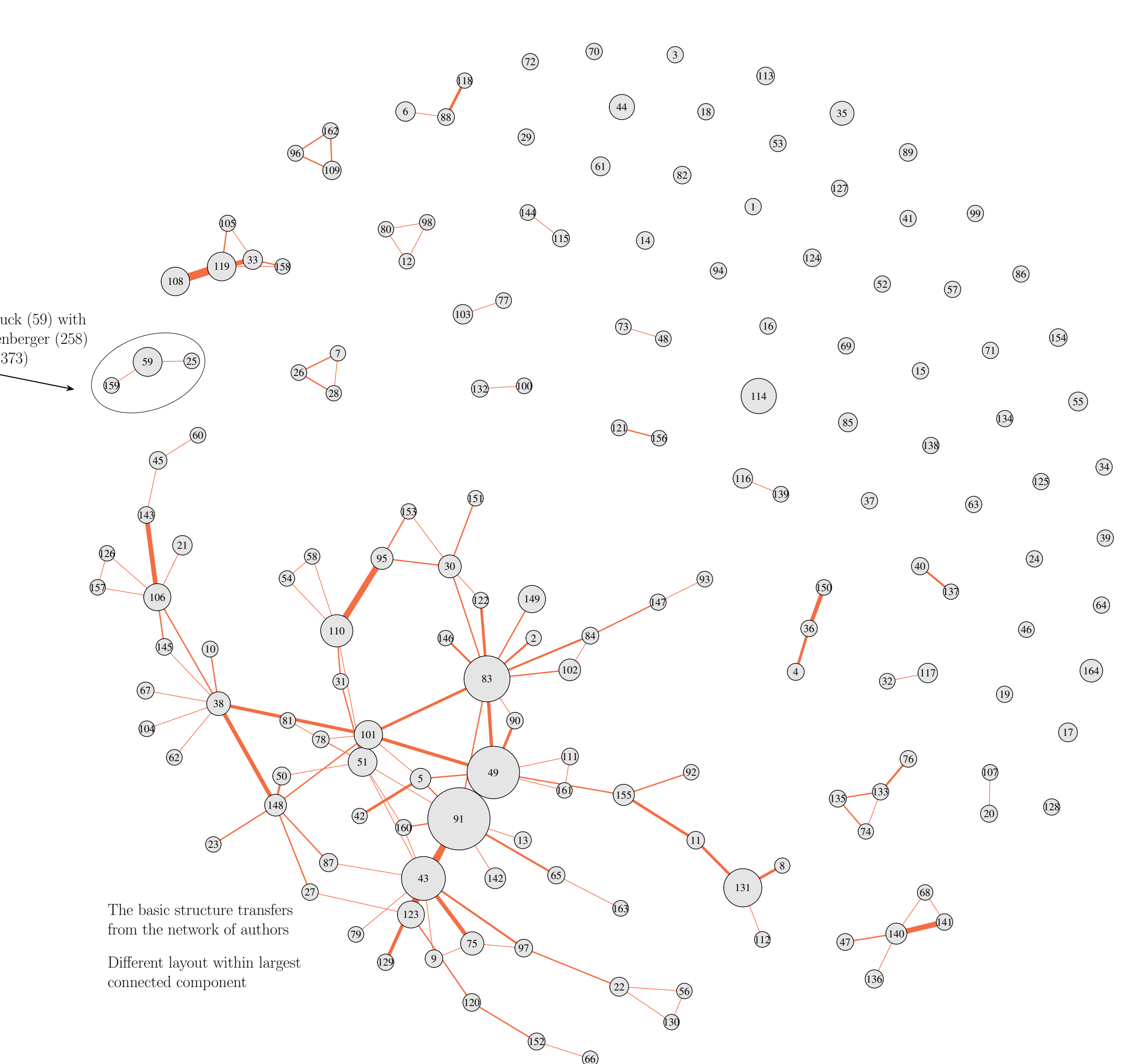
Global clustering coefficient: 0.36

Triangle collaborations among all triplet cooperations

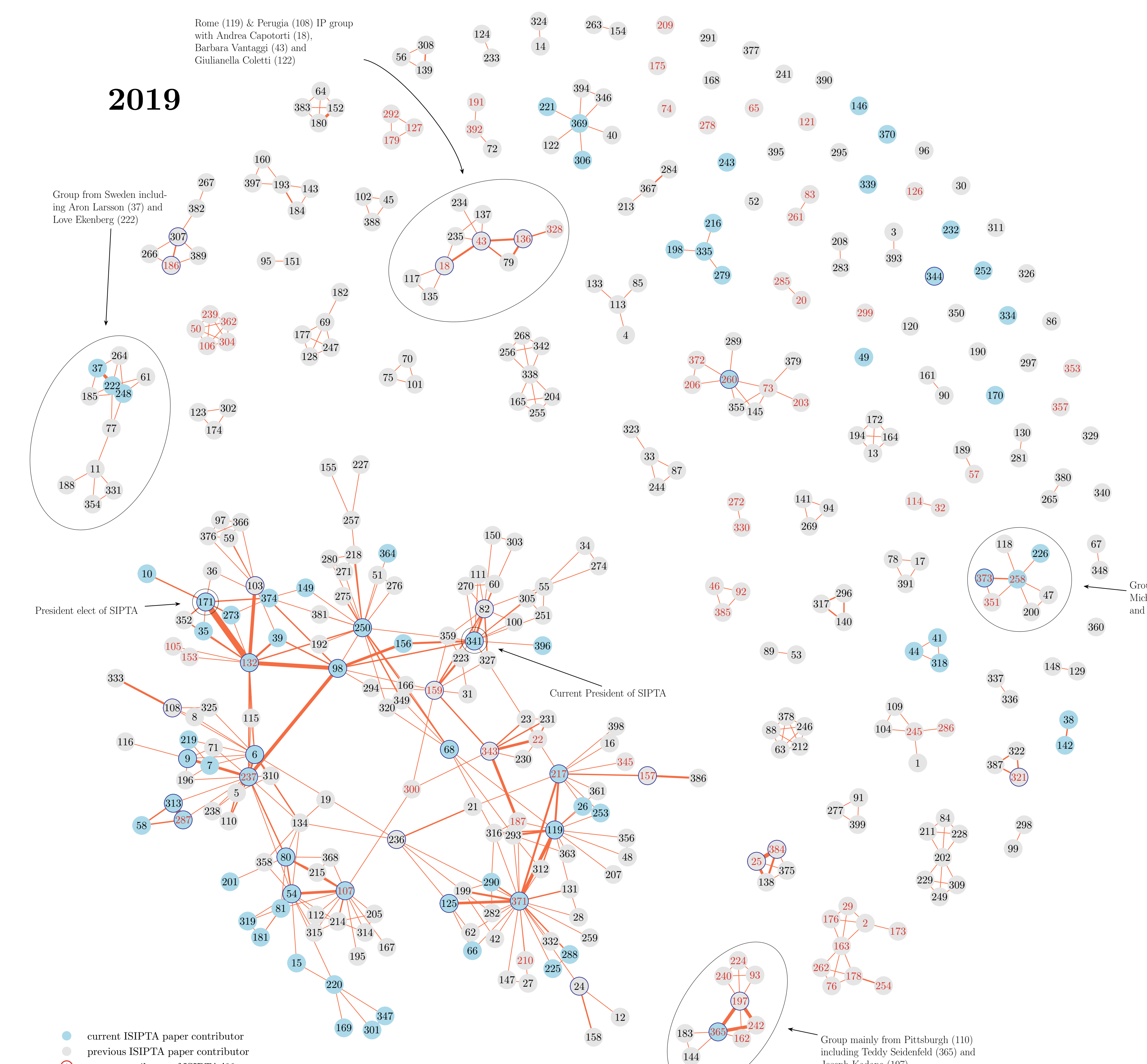
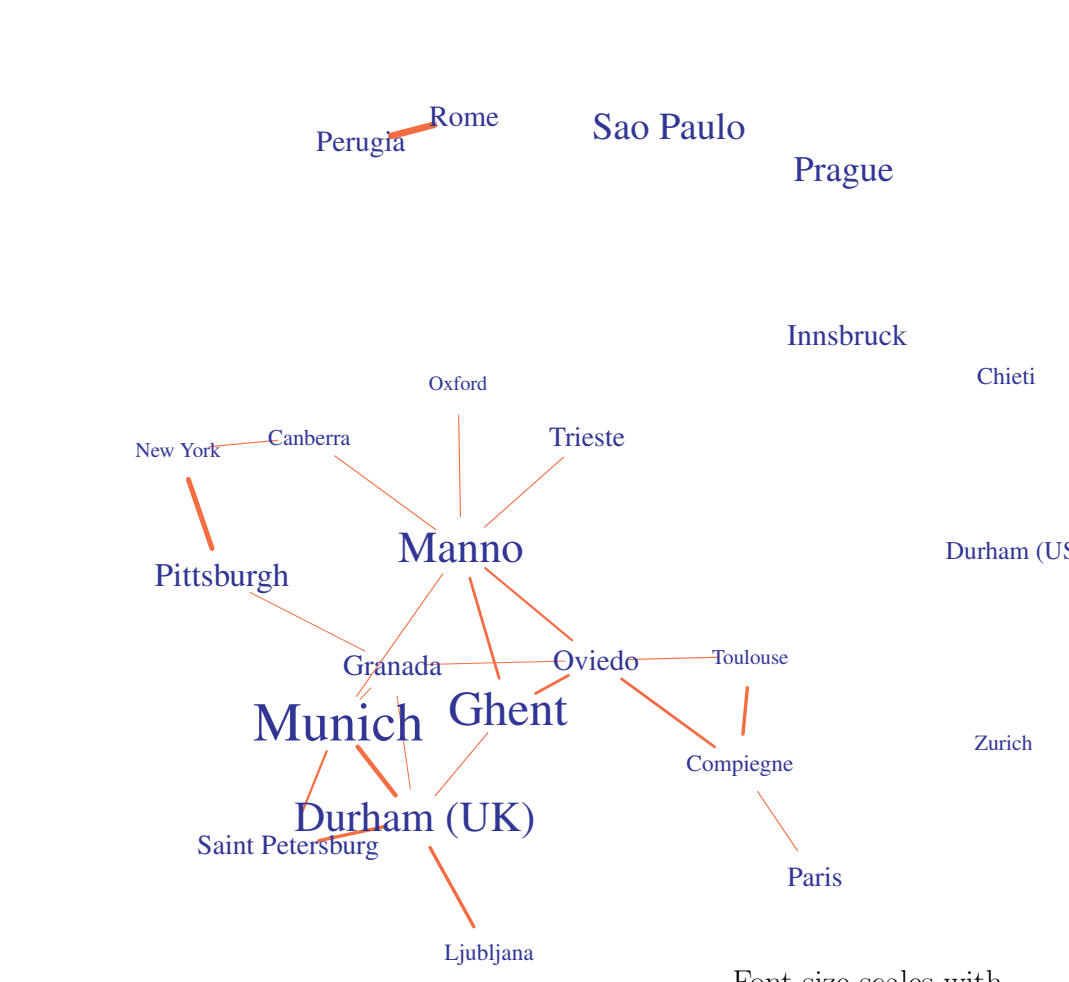
Local clustering coefficient: 0.81

Authors close to each other cooperate in groups

11. Complete City Network



10. Main City Network



● current ISIPTA paper contributor
● previous ISIPTA paper contributor
○ paper contributor of ISIPTA '99
○ In last decile of personal contributions