

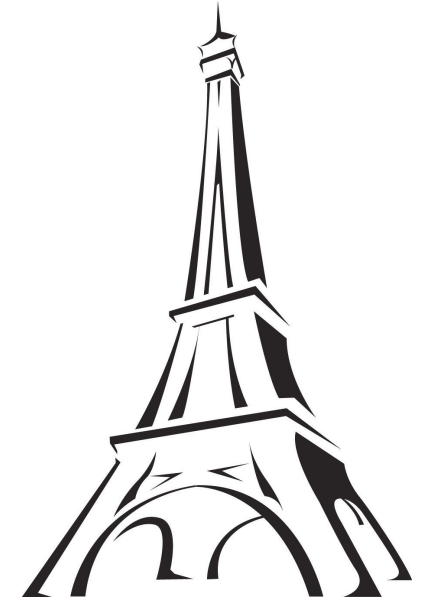
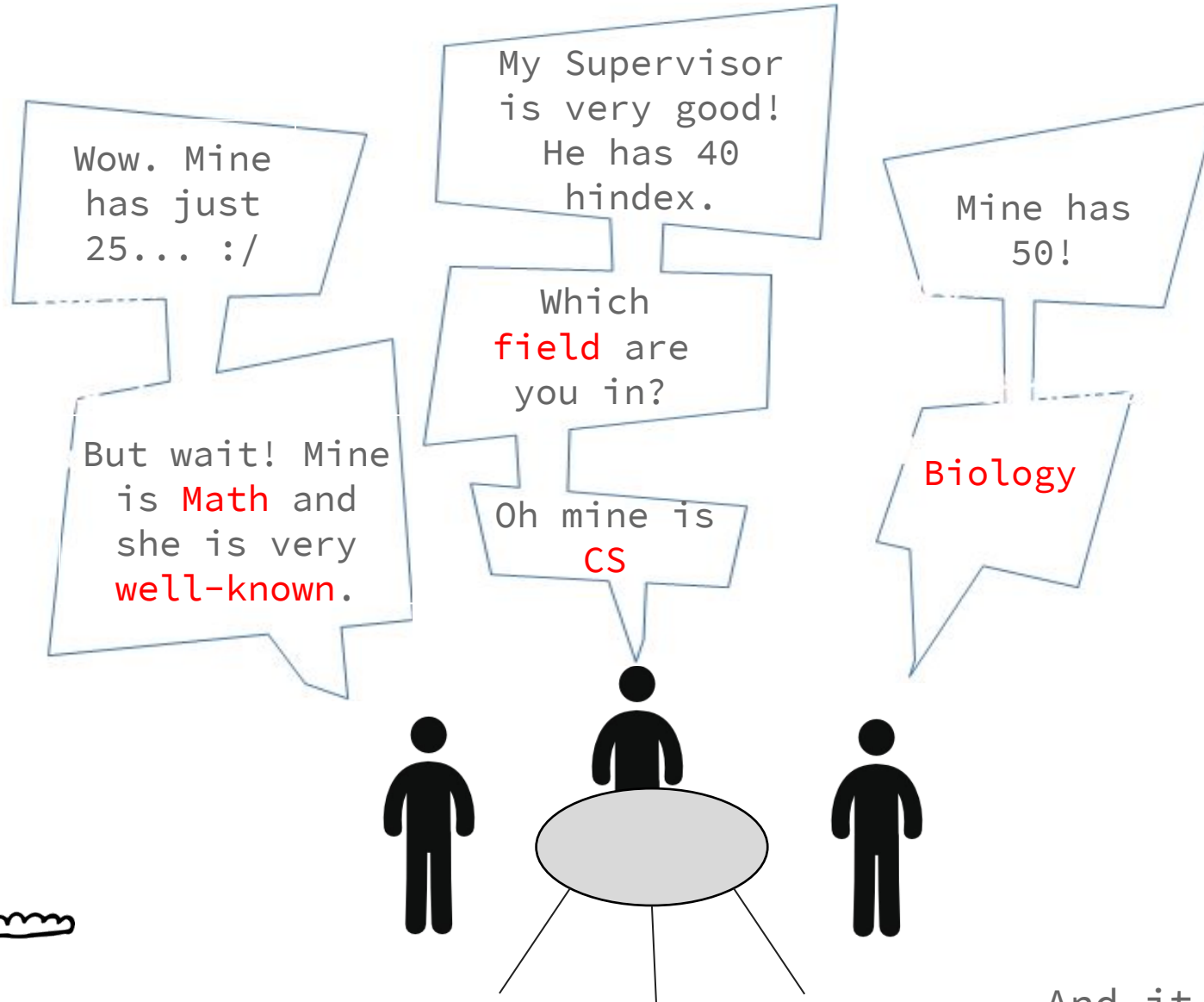


# Scientometrics for Success and Influence in the Microsoft Academic Graph

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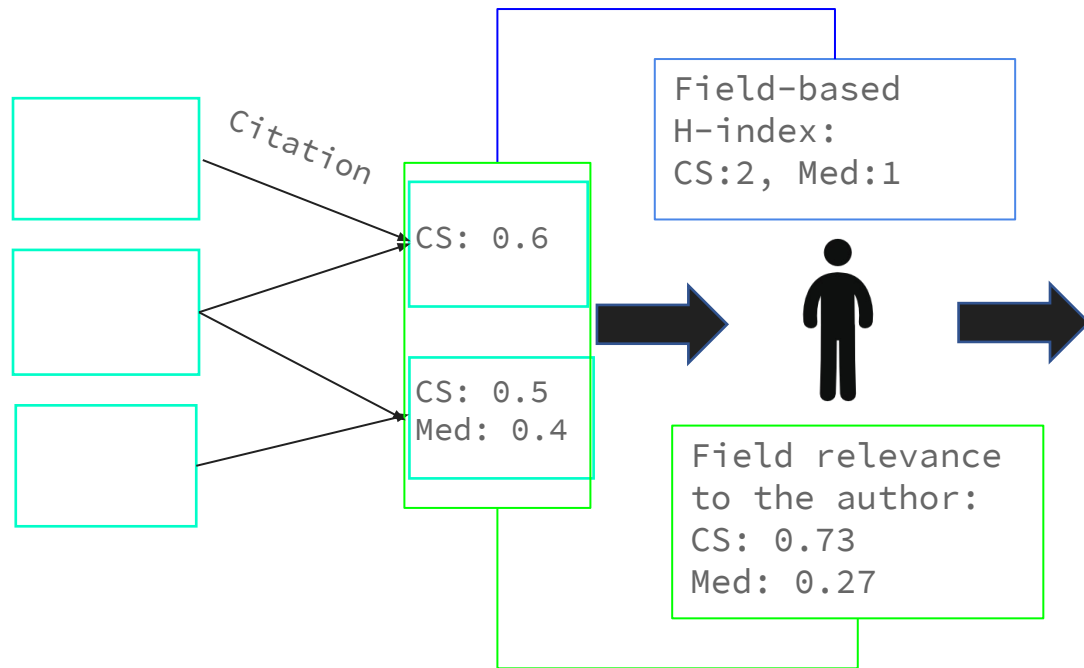
# A SUMMER NIGHT IN PARIS...



# IMPACT

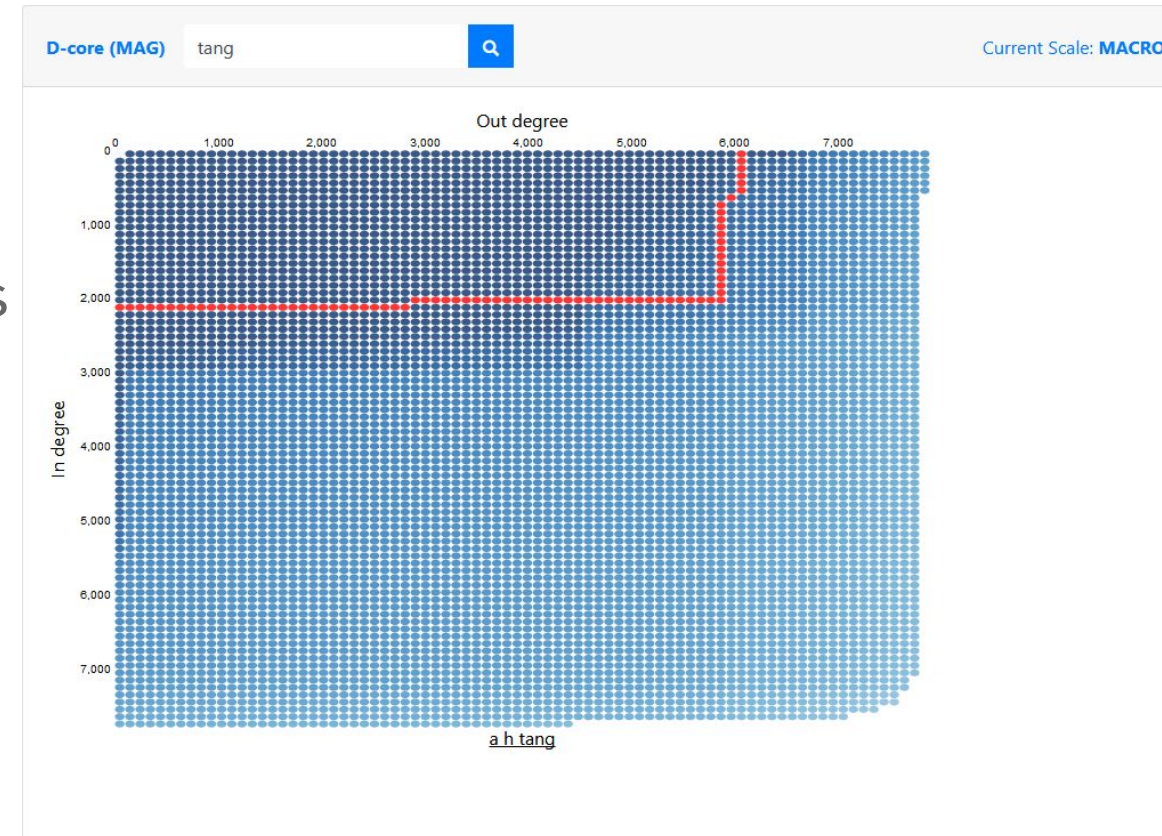
- Success = Impact and Influence
- Impact is *relative* to the *field*

➡ Use Microsoft Academic Graph (over 200m papers)



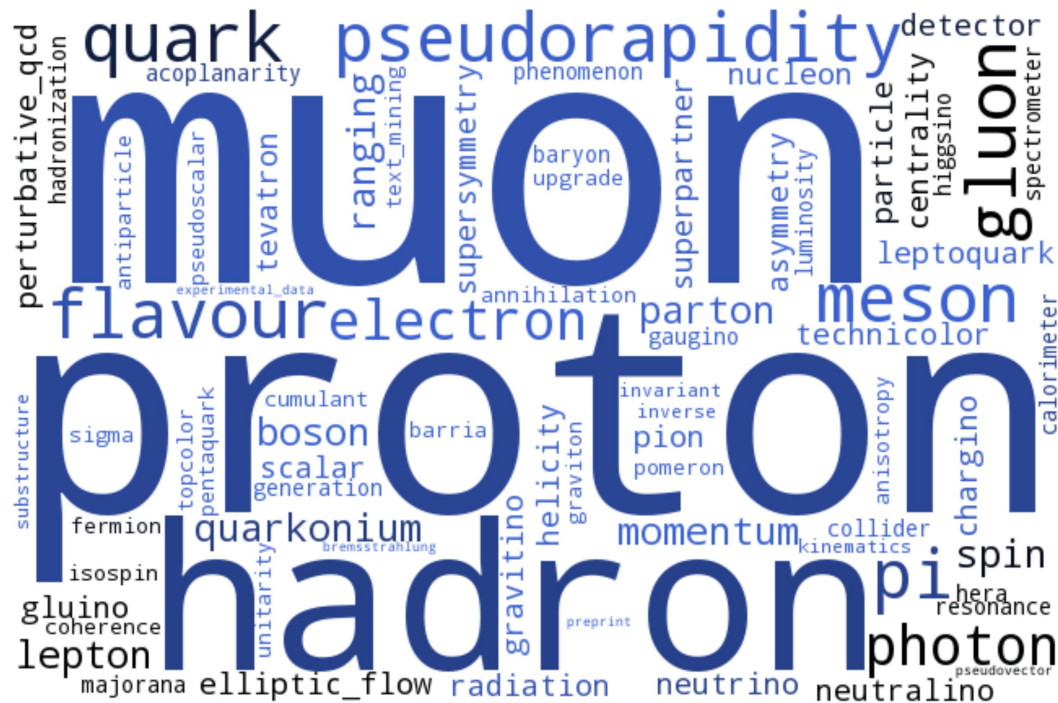
# INFLUENCE

- K-core in coauthorship?
  - Wrong, I can have many coauthors without being influential
- Use author-citation network
- Problem 1: Direction is important
  - Have to use D-core
  - More complex and less interpretable
- Problem 2: 17.000.000.000 edges
  - Construct it using the egonetworks
  - Remove edges with  $< 10$  citations
  - Run D-core in parallel



# PROOF OF CONCEPT

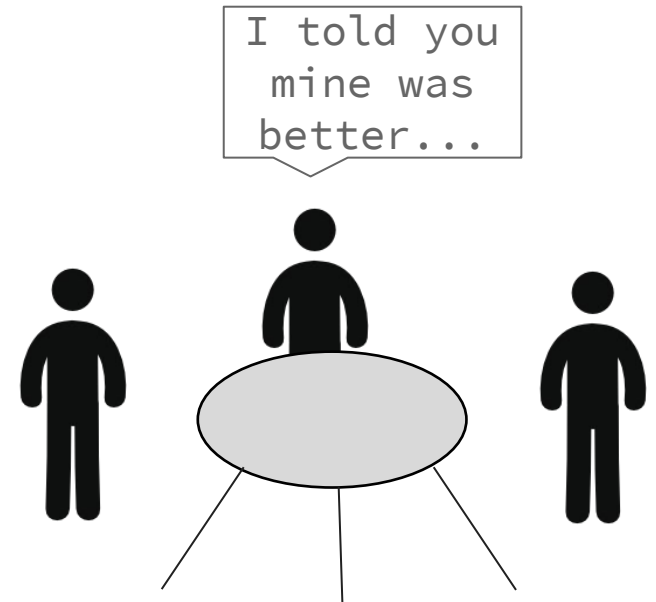
- Looked at the authors in the densest D-core
  - These are mostly high energy physicists
  - Their laboratories collaborate a lot with each other -> the papers have a massive number of authors
  - Every new finding cites previous papers with similar authors



*The wordcloud of the paper keywords from the authors in the densest d-core.*

# FUTURE WORK

1. Name disambiguation
2. Self citation rates
3. Number of coauthors



# Thank you

Link to App: <http://graphdegeneracy.org/scientometrics/>  
Code: <https://github.com/GiorgosPanagopoulos/MAG-Author-Influence-Scientometrics>