



Info

V. Batagelj

Teacher

Program

Requirements

Time-table

Sources

Examples

Introduction to Network Analysis using **Pajek**

0. Info

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IMFM Ljubljana and IAM UP Koper

PhD and MS program in Statistics
University of Ljubljana, 2022



Outline

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Vladimir Batagelj: vladimir.batagelj@fmf.uni-lj.si

Current version of slides (February 17, 2022 at 01 :19): [slides PDF](#)



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Vladimir Batagelj: **vladimir.batagelj@fmf.uni-lj.si**

Wiki page:

<http://vladowiki.fmf.uni-lj.si/doku.php?id=pajek:ev:pd:p22>

Course official page:

<https://e.fe.uni-lj.si/course/view.php?id=575>



Requirements/Exam

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Home project:

- ① for a network given in a picture make its description on a file and make a visualization an basic analyses.
- ② transform given data into network and analyze it
- ③ analysis of a large network



Resources

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- Pajek: <http://mrvar.fdv.uni-lj.si/pajek/>
- igraph R package: <http://igraph.org/r/>
- Inkscape: <https://inkscape.org/en/>
- Ghostscript, Ghostview and GSview:
<http://pages.cs.wisc.edu/~ghost/>



Roman road system

Tabula Peutingeriana

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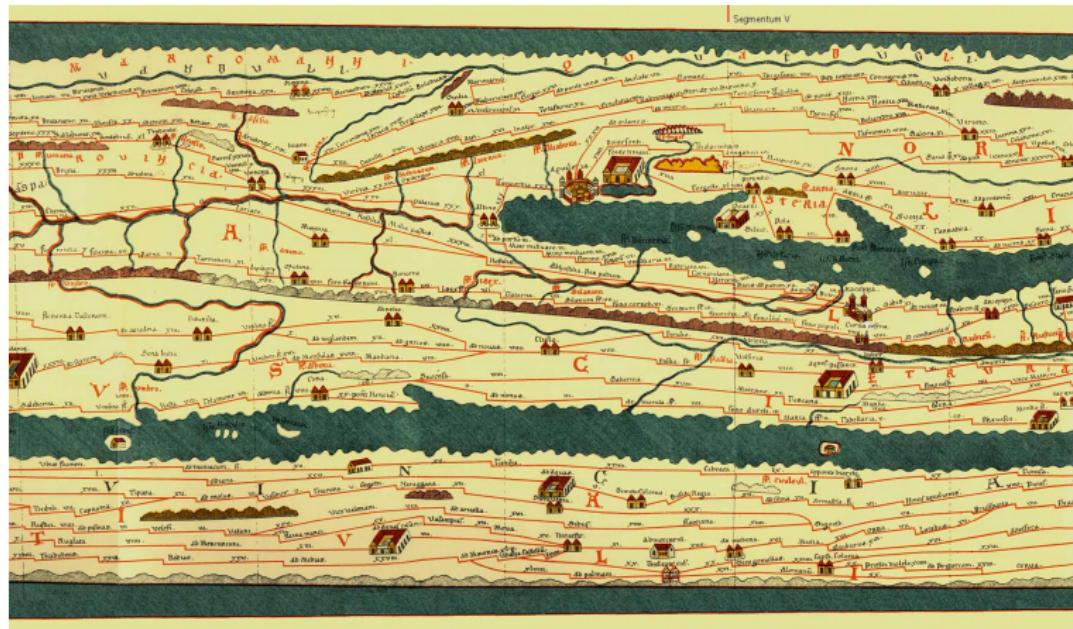
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Flowcharts

McCabe

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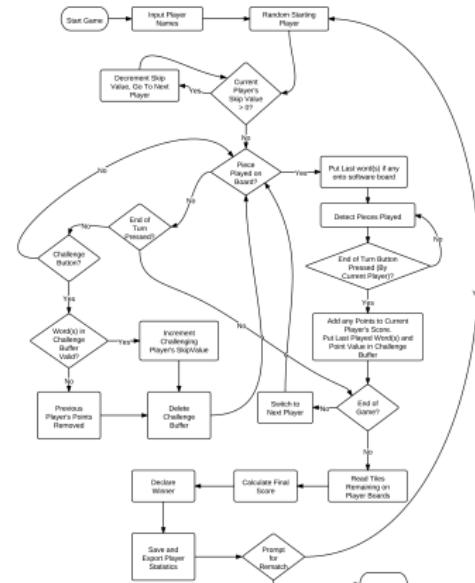
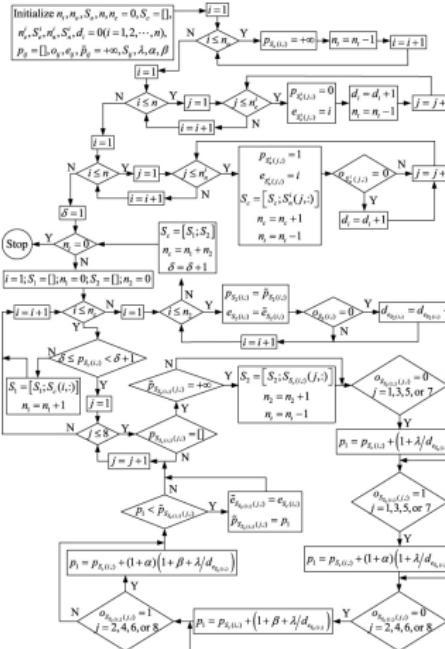
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IOP





Large organic molecules

3CRO, PDB

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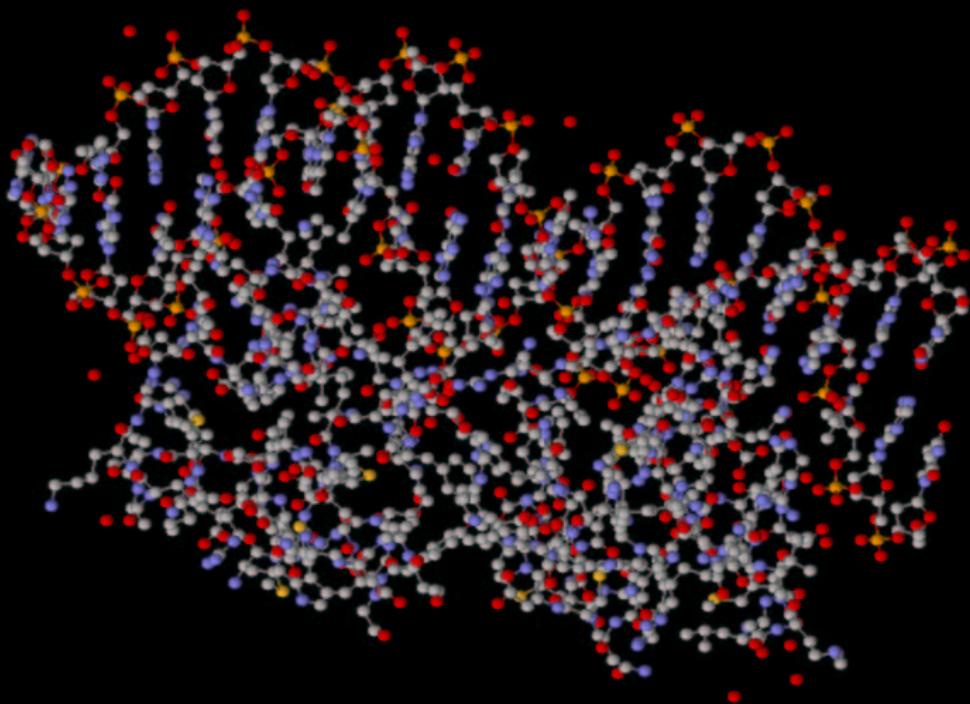
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Protein-protein interaction network

PluriPlus

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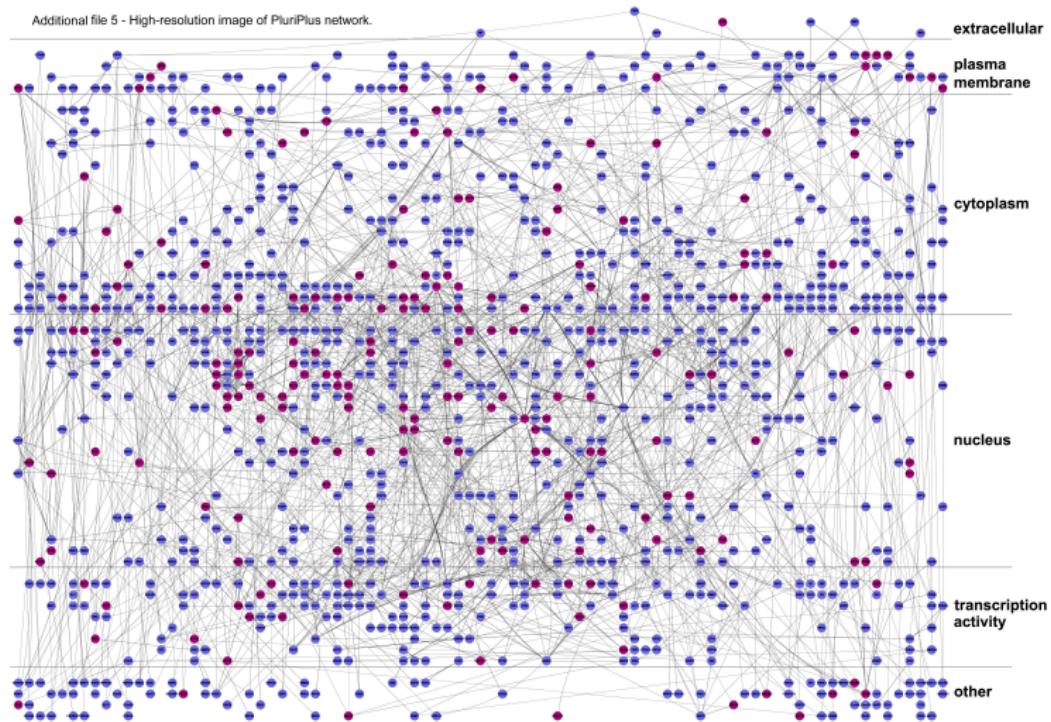
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Additional file 5 - High-resolution image of PluriPlus network.





Austrian research projects collaboration

FAS

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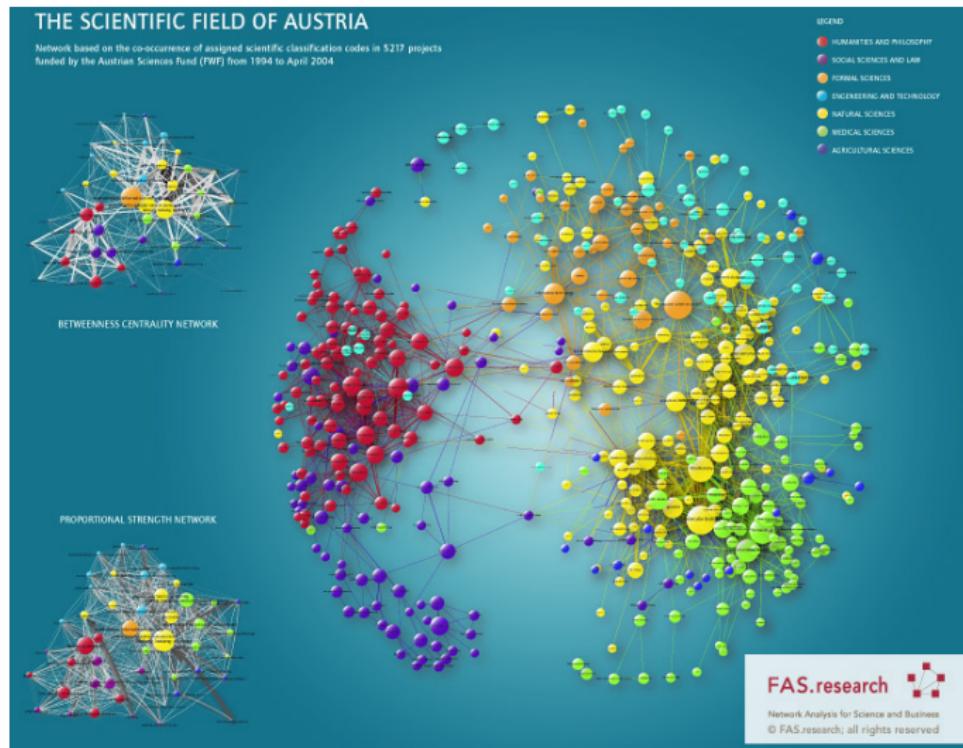
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Internet

Cheswick, Opte

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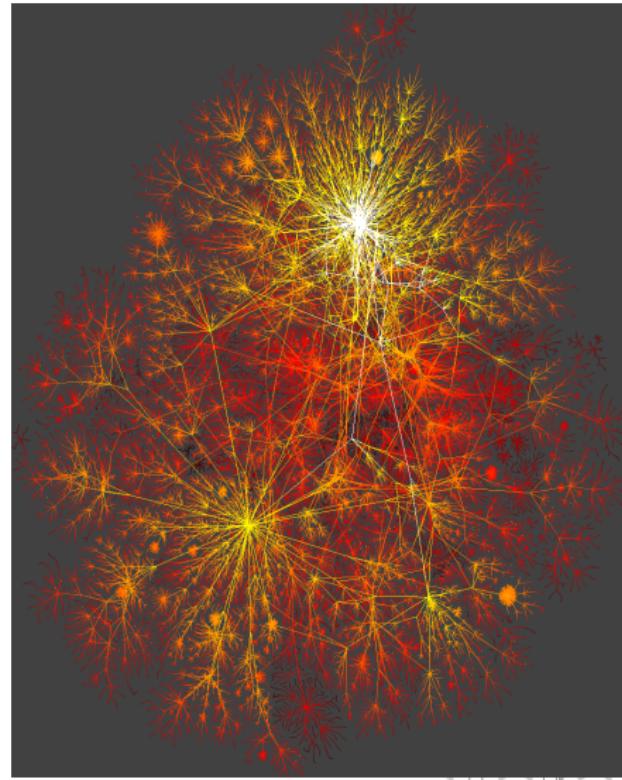
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They Rule

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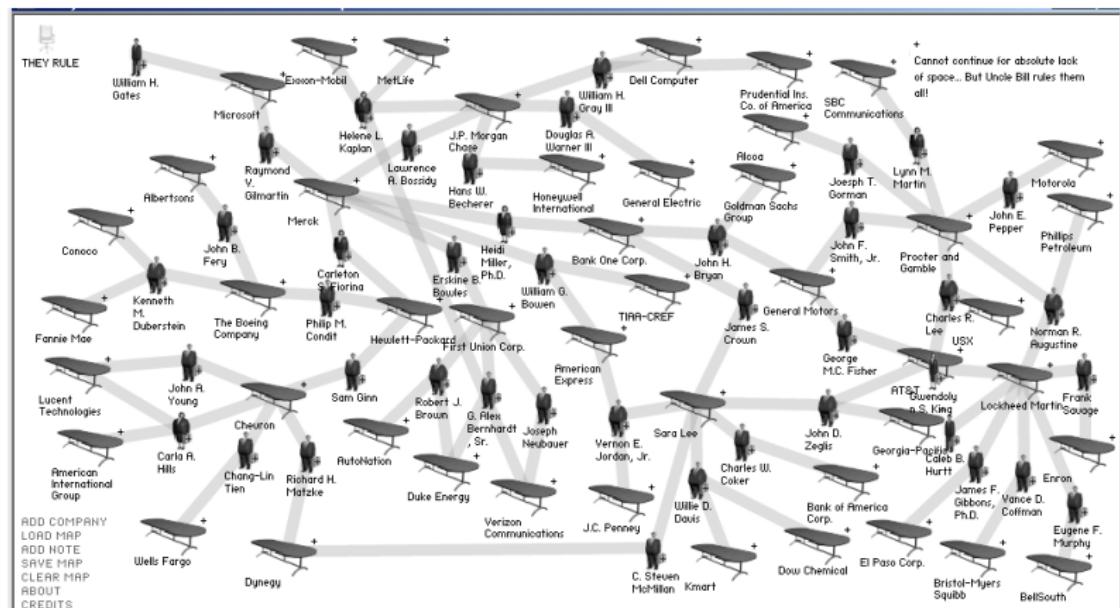
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"Countryside" school district

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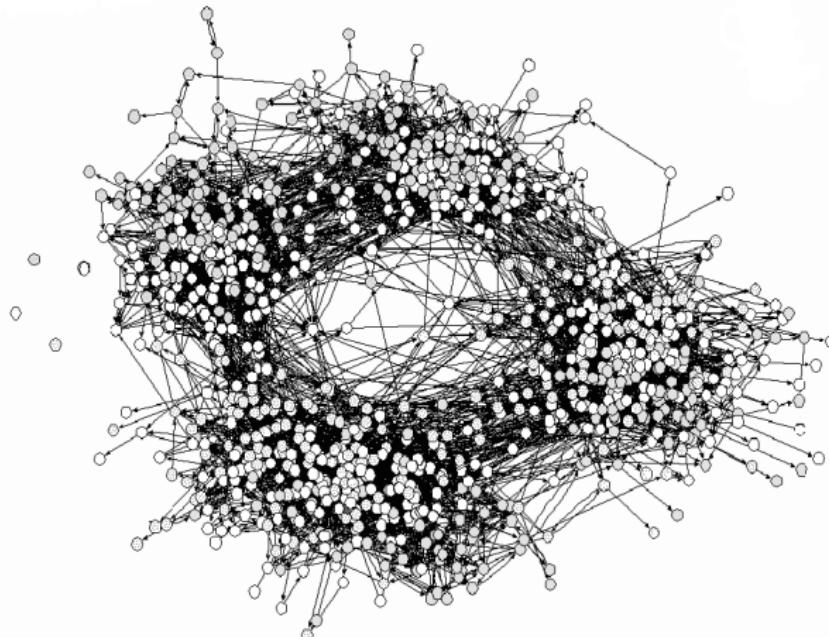
Program

Requirements

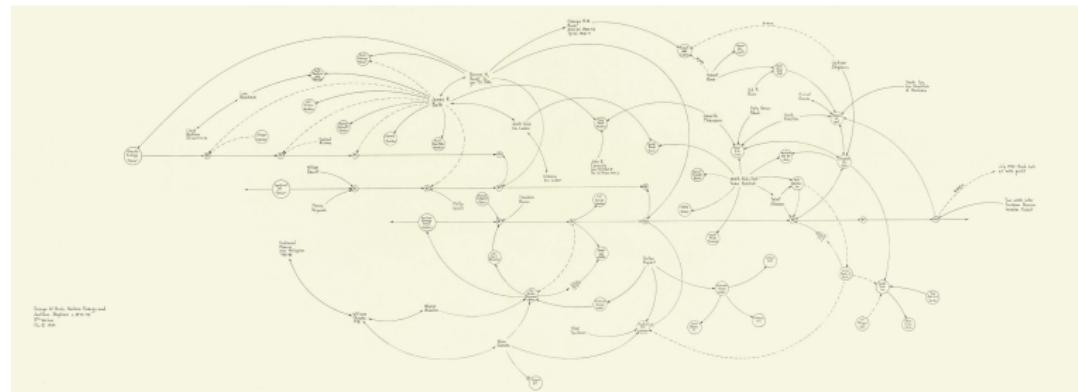
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Examples



James Moody (2001) AJS Vol 107, 3,679–716, friendship relation



More examples at [Visual Complexity](#)