

NA2-0, info

V. Batagelj, L. Kronegger

Teacher

Zoom

Requirement

Time-table

Sources

# Network Analysis 2

info

Vladimir Batagelj and Luka Kronegger

XIII Summer School of the ANR-Lab

Network Analysis and Contemporary Decision Sciences
International Laboratory for Applied Network Research
NRU HSE, Moscow, August 2022



## Outline

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Requirements

Time-table

Source

- 1 Teachers
- 2 Zoom
- 3 Requirements
- 4 Time-table
- 5 Sources



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

Luka Kronegger@fdv.uni-lj.si

Current version of slides (August 16, 2022 at 01:28): slides PDF



## **Teachers**

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#### Teachers

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Source





Vladimir Batagelj: vladimir.batagelj@fmf.uni-lj.si Luka Kronegger: luka.kronegger@fdv.uni-lj.si

NA 2 on wiki:

http://vladowiki.fmf.uni-lj.si/doku.php?id=ru:hse:snet22

MASNA-MDNA Summer school 2022:

https://anr.hse.ru/en/announcements/708432336.html



# Zoom

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7<sub>00</sub>m

The lectures will be online using Zoom from 17:00 till 20:15 (21:00) (Moscow time): Link to Zoom

Vladimir Batageli is inviting you to a scheduled Zoom meeting.

Topic: Lecture

Time: This is a recurring meeting Meet anytime

Join Zoom Meeting

https://us06web.zoom.us/i/86953943473?pwd=Y3NMSGk5WlliNXFYTFdsQkJ6SlRwZz09

Meeting ID: 869 5394 3473

Passcode: 778851

The Zoom link for Luka's lectures TBA.



### Requirements/Exam

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Sources

### Home project with 3 tasks:

- 1 Solving a problem with the Monte Carlo method.
- 2 ???
- 3 ???



### Time-table

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Time-table

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day		time	lecturer
Monday	15	17–21	Batagelj
Tuesday	16	17–21	Batagelj
Wednesday	17	17–21	Batagelj
Thursday	18	17–21	Batagelj
Monday	22	17–20:15	Batagelj
Tuesday	23	17–20:15	Batagelj
Wednesday	24	17–20:15	Batagelj
Thursday	25	??–??	Kronegger
Friday	26	??–??	Kronegger

17:00-18:45, break, 19:00-21:00

17:00-18:30, break, 18:45-20:15



### Resources

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Sources

- Pajek: http://mrvar.fdv.uni-lj.si/pajek/
- igraph R package: http://igraph.org/r/
- Inkscape: https://inkscape.org/en/



### References I

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Teachers

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Time-table

Sources

- Annibale, Alessia; Coolen, Anthony C. C.; Roberts, E. S: Generating Random Networks and Graphs. Oxford University Press, 2017
  - Bollobás, Béla; Kozma, Robert; Miklós, Dezső (eds.): Handbook of Large-Scale Random Networks. Bolyai Society Mathematical Studies 18. Springer, 2008
- Estrada, Ernesto: The Structure of Complex Networks: Theory and Applications. Oxford UP, 2011/16
- Gentle, James E.: Random Number Generation and Monte Carlo Methods, 2nd ed. Statistics and computing. Springer, 2003
- Hofstad, Remco van der: Random Graphs and Complex Networks, Volume I (draft), 2022 PDF
- Kolaczyk, Eric D.; Csárdi, Gábor: Statistical Analysis of Network Data with R, 2nd ed. Springer, 2020



### References II

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Time-table

Sources

Lusher, Dean; Koskinen, Johan; Robins, Garry: Exponential Random Graph Models for Social Networks Theory, Methods, and Applications. CUP, 2012