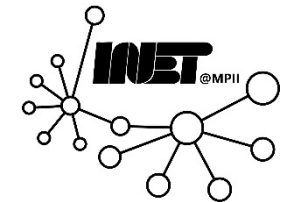# Data Networks

Prof. Anja Feldmann, Ph.D.

Dr. Oliver Gasser

Dr. Savvas Zannettou

Dr. Devashish Gosain

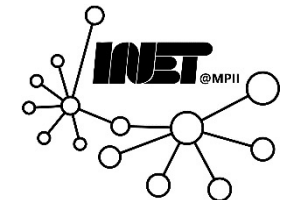# Who are we? Anja Feldmann

- Education
    - Diplom: University of Paderborn, Germany
    - Ph.D.:   Carnegie Mellon University (CMU), Pittsburgh, US
- Work experience
    - Researcher at AT&T, Murray Hill, Florham Park, US
    - Professor at
        - 00 – 02: University des Saarlandes, Germany
        - 02 – 06: TU München, Germany
        - 06 – 17: TU Berlin, Germany
        - 18 –   MPI Saarbrücken, Germany
    - SAP SE Supervisory Board member 2012 – 2019
- Research interests
    - Internet measurement, performance evaluation, network architecture
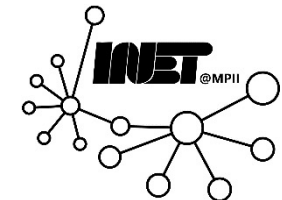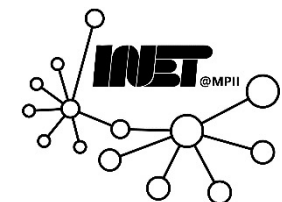
Who are we? Oliver Gasser

- Education
  - Dr. rer. nat.: TU München, Germany

- Work experience
  - Postdoctoral Researcher
    - 20 –   MPI Saarbrücken, Germany

- Research interests
  - Internet measurements, empirical security analysis, DNS deployment

Who are we? Savvas Zannettou

- Education
  - Ph.D.: Computer Science from Cyprus University of Technology, 2019

- Work experience
  - Research Intern
    - 2017 - 2018 Telefonica Research (12 months)
  - Postdoctoral Researcher
    - 2019 – current   MPI Saarbrücken, Germany

- Research interests
  - Social Networks, Hate Speech, Misinformation

Who are we? Devashish Gosain

- Education
  - Ph.D.: Computer Science from IIIT Delhi, India (2015-2020)

- Work experience
  - Research Intern
    - 2019 - Brigham Young University, USA (6 months)
  - Postdoctoral Researcher
    - 20 – MPI Saarbrücken, Germany

- Research interests
  - Internet censorship, Anonymity, Internet measurments
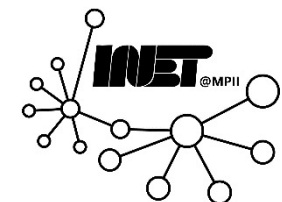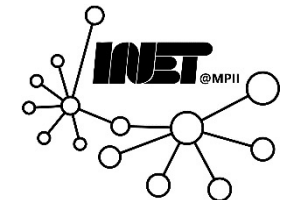
General Information

- Stammvorlesung
  - Master/Bachelor

- Virtual lectures: Videos available for download on lecture site

- Q&A for lecture material: Time and Rooms (check lecture site for link)
  - Tuesday   4 - 6pm   Virtual Room
  - Friday   12 - 2pm   Virtual Room

- Tutorials: Time and Rooms (check lecture site for link)
  - Friday   2 - 4pm   Virtual Room
  - Monday   12 - 2pm   Virtual Room

- Web site: https://www.mpi-inf.mpg.de/inet/
- Lecture site: https://inet-teaching.mpi-inf.mpg.de/dn_21/
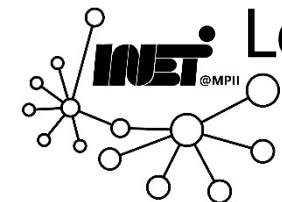
General Information (2)

- Tutorials
  - Weekly homework assignments/exercises
  - Weekly recitation sessions

- Homework grading – prerequisite for exam!
  - 50% of homework points => passed tutorials
  - 60% of homework points => + 0.3 bonus for exam grade
  - 75% of homework points => + 0.7 bonus for exam grade
    (bonus does not apply for failed exams!)

- Registration for course/tutorials
  https://inet-teaching.mpi-inf.mpg.de/dn_21/

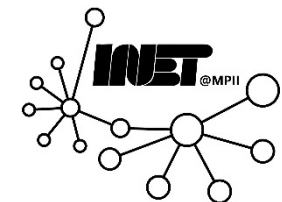# General Information (3)

- Tutors
  - Said Jawad Saidi, Mirko Palmer (organization)
  - Seif(eddine) Fathalli, Aniss Maghsoudlou (organization)
  - Mohamad Hoseini
  - Zubair Sediqi
  - Emilia Weyulu
  - Cristian Munteanu
 - Daniel Wagner
  - Danesh Zeynali
  - Florian Schießl
- Exam
  - Most likely oral exam after lecture periods ends

General Information (4)

- Homework
  - Start: After second Q&A session
  - Hand-in by Friday before 12pm (one week later!)
    - Online via course site https://inet-teaching.mpi-inf.mpg.de/dn_21/
  - Plagiarism: Not allowed
    (Copy from Internet, text book, each other, …)
    - Group discussions OK but no verbatim solutions!
    - No points for whole assignment (first occurrence)
    - Exclusion from class (repeat offenders)

- Online tutorial
  - Start: This Friday 16th April 02:15pm
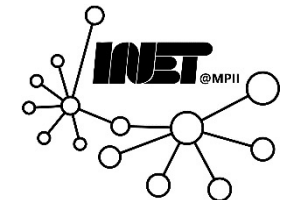   Monday 19th April 12:15pm
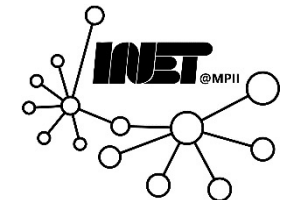
Exam

- Oral Exam (most likely due to Corona restrictions)
  - Dates: July/August (after the end of the lecture period)
  - Course registration: According to Uni-SB regulations

- Language
  - Questions: English
  - Answers: English or German
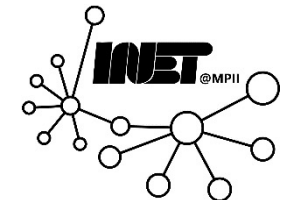
What is this course about?

- Principles underlying the Internet

- Goals
  - Identify, study common architectural components, protocol mechanisms

- Examples
  - Internet architecture
  - Network application protocols

- Principles
  - State handling, Virtualization, …

Background reading

- Kurose and Ross:
  Computer Networking: A Top-Down Approach Featuring the Internet.
  Sixth edition, Addison-Wesley

  Preliminary edition (2000) online: student (quarter24)

- Peterson, Davie:
  Computer Networks. A systems approach
  Morgan Kaufmann

- … see Web